578/2682 FIGURE **528**

 ${\tt MKFISTSLLLMLLVSSLSPVQGVLEVYYTSLRCRCVQESSVFIPRRFIDRIQILPRGNGCPRKEIIVWKKNKSIV} \\ {\tt CVDPQAEWIQRMMEVLRKRSSSTLPVPVFKRKIP}$

579/2682 FIGURE **529**

GTGGAGGCAAAAGGAGATACCATCCCAGGCTCAGTCCAACCCCTCTCCAAAACGGCTTTTCTGACACTCCAGGT AGCGAGGGAGTTGGGTCTCCAGGTTGTGCGAGGAGCAAATCATGACCGCCAAGGCCGTAGACAAAATCCCAGTAA CTCTCAGTGGTTTTGTGCACCAGCTGTCTGACAACATCTACCCGGTGGAGGACCTCGCCGCCACGTCGGTGACCA TCTTTCCCAATGCCGAACTGGGAGGCCCCTTTGACCAGATGAACGGAGTGGCCGGAGATGGCATGATCAACATTG ACATGACTGGAGAGAGAGGTCGTTGGATCTCCCATATCCCAGCAGCTTTGCTCCCGTCTCTGCACCTAGAAACC AGACCTTCACTTACATGGGCAAGTTCTCCATTGACCCTCAGTACCCTGGTGCCAGCTGCTACCCAGAAGGCATAA TCAATATTGTGAGTGCAGGCATCTTGCAAGGGGTCACTTCCCCAGCTTCAACCACAGCCTCATCCAGCGTCACCT CTGCCTCCCCAACCCACTGGCCACAGGACCCCTGGGTGTGTGCACCATGTCCCAGACCCAGCCTGACCTGGACC ACCTGTACTCTCCGCCACCGCCTCCTCCTCCTTATTCTGGCTGTGCAGGAGACCTCTACCAGGACCCTTCTGCGT CAGCCACGGACCCAGGTCTCTCCCAATGATCCCAGACTATCCTGGATTCTTTCCATCTCAGTGCCAGAGAGACC TACATGGTACAGCTGGCCCAGACCGTAAGCCCTTTCCCTGCCCACTGGACACCCTGCGGGTGCCCCCTCCACTCA CTCCACTCTCTACAATCCGTAACTTTACCCTGGGGGGCCCCAGTGCTGGGGTGACCGGACCAGGGGCCAGTGGAG GCAGCGAGGGACCCCGGCTGCCTGGTAGCAGCTCAGCAGCAGCAGCCGCCGCCGCCGCCGCCGCCTATAACCCAC ACCACCTGCCACTGCGGCCCATTCTGAGGCCTCGCAAGTACCCCAACAGACCCAGCAAGACGCCGGTGCACGAGA GGCCTACCCGTGCCCAGCAGAAGGCTGCGACCGGCGGTTCTCCCGCTCTGACGAGCTGACACGGCACATCCGAA TCCACACTGGGCATAAGCCCTTCCAGTGTCGGATCTGCATGCGCAACTTCAGCCGCAGTGACCACCTCACCACCC ATATCCGCACCCACACCGGTGAGAAGCCCTTCGCCTGTGACTACTGTGGCCGAAAGTTTGCCCGGAGTGATGAGA GGAAGCGCCACACCAAGATCCACCTGAGACAGAAAGAGCGGAAAAGCAGTGCCCCCTCTGCATCGGTGCCAGCCC CCTCTACAGCCTCCTGCTCTGGGGGCGTGCAGCCTGGGGGTACCCTGTGCAGCAGTAACAGCAGTCTTGGCG GAGGGCCGCTCGCCCTTGCTCCTCTCGGACCCGGACACCTTGAGATGAGACTCAGGCTGATACACCAGCTCCCA AAGGTCCCGGAGGCCCTTTGTCCACTGGAGCTGCACAACAACACTACCACCCTTTCCTGTCCCTCTCTCCCTTT GTTGGGCAAAGGGCTTTGGTGGAGCTAGCACTGCCCCCTTTCCACCTAGAAGCAGGTTCTTCCTAAAACTTAGCC TCCCCTGGCCAAGAGGGCTGAGGTCTGACCCTGCTTTAAAGGGTTGTTTGACTAGGTTTTGCTACCCCACTTCCC CTTATTTTGACCCATCACAGGTTTTTGACCCTGGATGTCAGAGTTGATCTAAGACGTTTTCTACAATAGGTTGGG AGATGCTGATCCCTTCAAGTGGGGACAGCAAAAAGACAAGCAAAACTGATGTGCACTTTATGGCTTGGGACTGAT TTGGGGGACATTGTACAGTGAGTGAAGTATAGCCTTTATGCCACACTCTGTGGCCCTAAAATGGTGAATCAGAGC ATATCTAGTTGTCTCAACCCTTGAAGCAATATGTATTATATACTCAGAGAACAGAAGTGCAATGTGATGGGAGGA ACGTAGCAATATCTGCTCCTTTTCGAGTTGTTTGAGAAATGTAGGCTATTTTTTCAGTGTATATCCACTCAGATT TTGTGTATTTTTGATGTACCCACACTGTTCTCTAAATTCTGAATCTTTGGGAAAAAATGTAAAGCATTTATGATC CTTGGTCGCCTTGTGTGATGTAGACAAATGTTACAAGGCTGCATGTAAATGGGTTGCCTTATTATGGAGAAAAAA TGTATGCTTTGTTTTTGTGACTTAAAAGTGTTACCTTTGTAGTCAAATTTCAGATAAGAATGTACATAATGTTACC

580/2682 FIGURE 530

MMTAKAVDKIPVTLSGFVHQLSDNIYPVEDLAATSVTIFPNAELGGPFDQMNGVAGDGMINIDMTGEKRSLDLPY PSSFAPVSAPRNQTFTYMGKFSIDPQYPGASCYPEGIINIVSAGILQGVTSPASTTASSSVTSASPNPLATGPLG VCTMSQTQPDLDHLYSPPPPPPPYSGCAGDLYQDPSAFLSAATTSTSSSLAYPPPPSYPSPKPATDPGLFPMIPD YPGFFPSQCQRDLHGTAGPDRKPFPCPLDTLRVPPPLTPLSTIRNFTLGGPSAGVTGPGASGGSEGPRLPGSSSA AAAAAAAAYNPHHLPLRPILRPRKYPNRPSKTPVHERPYPCPAEGCDRRFSRSDELTRHIRIHTGHKPFQCRIC MRNFSRSDHLTTHIRTHTGEKPFACDYCGRKFARSDERKRHTKIHLRQKERKSSAPSASVPAPSTASCSGGVQPG GTLCSSNSSSLGGGPLAPCSSRTRTP

581/2682 FIGURE 531

GCCCAGGTGACTGACTAATCCGCCGCCTTCAGGAGACAGAATTGGCCAAGGCCTGAAGGCCCGGAGTGCACCAG ACATTTCAACAGCCCACATCCCACCCTGCACCTGCGGACATCAGCCAGAAGCAAGTTCACAGGCCTCTGCAGAC CCCTGACCTCTCTGGCTTCTACTCCCTGACCTCAGGCAGCATGGGGCAGCTCCCCCACACTGTGAGCTGGTTCAC CCACCCATCCTTGATGCTAGGTTCTGGTGTACCTGGTCACCCAGCAGCCATCCCCCACCCGGCCATTGTGCCCCC CTCAGGGAAGCAGGAGCTGCAGCCCTTCGACCGCAACCTGAAGACACAAGCAGAGTCCAAGGCAGAGAAGGAGGC CAAGAAGCCAACCATCAAGAAGCCCCTCAATGCCTTCATGCTGTACATGAAGGAGATGAGAGCCAAGGTCATTGC AGAGTGCACACTTAAGGAGAGCGCTGCCATCAACCAGATCCTGGGCCGCAGGTGGCACGCGCTGTCGCGAGAAGA GCAGGCCAAGTACTATGAGCTGGCCCGCAAGGAGAGGCAGCTGCACATGCAGCTATACCCAGGCTGGTCAGCGCG GGACAACTACGGGAAGAAGAAGAGGCGGTCGAGGGAAAAGCACCAAGAATCCACCACAGACCCTGGCTCGCCTAA GAAATGCCGTGCTCGCTTTGGCCTCAACCAGCAGACGATTGGTGTGTGCTCCGTGCAGA<u>TAA</u>CTCTCTTCACTATT AGTGCTCTAGGCTGCCCCGGGTCCCCAGCTCCCCAGGACTCACCCTCATACCATCTGCTGCCCCGCTTCCCCACA GAACTGCTTACTAGCCCTGCGGAGCGGCACCTACATCCCCAGGTCTCTCCACTGCTCTCAGCCTCCCAACCCCAG GGCCCCACAGGCCCCCGCAGCACCTGCAGAGCACACAGGTACAGCAACAGGAATCTCAGAGACAGGTGGCCT AGCAGGCACAGGACACCTGGCCGCCTCCAGGAGCCTACCCCCTGAAAATGACAGAGACCCAGATCTCATGGAAAC TGGCAGGGGTCCTGTTAACGTCATCTCAGGGTCCAGACCCTGAAGATTTCAGAGGCTGCAGAACTTCTGCCTGAA CCTGGGGTCATCGATTCAAACTGCTCCAAGTGGTGGGAATCAGATCTGTCTTGATGTGTCATCTAATTAAGGGAA GCTTTTCTGCTATAGGTCAGAGATGGGCTGAACTGAGCCTAGCTACCTTCTCTACCCATCTCCCCATCCCCAC TGCCACACCCTCCCCATTCAGACACTTCATGGACCAAGAATGAGCTGGTTTGTCAAACAACATGTGAGCATGGTC ACAAGCACAAAGCTCAAGATGACAGCTCTTCTAAGGAAATGGAGAAGCTCTGTTTATAAAAAACAAAAACAAAACC AGCTGCTACTCATAAGTTGGACCAGAGGAAGCCCCTTACTATGATCTCAGGAGCTTGCAAGAAGCAGGAAGGGGA ATGGAATAGGTTAAGTTTAGGCCTATCAACCTAAGCAACAGAAATAATCTGACACTACCTTATCAGGCAAATTGG GGAGGGGAGGGTGTATCTAGCTCTAGTTCAAATTATTTGGAAGTGTTCCCTGAGAAACCCACCAGCCTAAGAAGC TCTGGCCCCAGGCTTGTCACTAGCAGCTGCAGTCAACAGTTCAAAGAAGTCATGGCCCAAATCCAGTGTGCACCC TTGAGAGGGCAAACCCAAAACCTCATGACAGCCAGAGCCTGTCTTTCAGCATTCAGTCGCCTGGGAAGCTCCAGT TTCCCCATGGGGCTGCGGGACAGAGGACCATTACAACTAGATCAAGGAGCCCAGAAAACCTCCAGTAGTGGACAA CAGGTTTTCACCATAGCCTACGTTAACCCATTTTTGAGCCAAGCTTCAACCCTCAGCCTTGAAAAAACAAGTCTTT AATTTAATTTTTGTTTTTTGCCTAAATCCAAAGAAAAAGGGCTGCCGGGCCAGGCGCGGTCGTCACGCCTGTAAT CCCAGCACTTTGGCAGGCCGAGGCAGGTGGATCACCTGACGTCAGTAGTTTGAGACCAGCCTGGCCAACATGGTG AAACCCTGTATCTACTAAAAATACAAAAATTAGCCGGACGTGGTGGTGCGCGCATGTAATCCCAGCTACTCGGGA GGCTGAGGCGGAAGAATCACTTGAACCCGGGAGGCGGAGGTTCCAGTGAGCCGAGATGGCGCTATTGCACTCCAG **AAAAAAAGCCTTTAGTTCCTACTTTAGCCACTGGTTTCTCAGAATCCAAAGATCACATATTCTAGTGTAACACTG** CAAGAAGTCTTGAGAAAAAGATTATTGTAGTGTTCAAAATATTTTTGTATTGTTAATGCATCATCATAGAAAAAC

582/2682 FIGURE 532

 $\label{thm:pppsgagohooppplhkanopphgvpqlslyehfnsphptpapalisqkQvhrplqtpplsgkyltsgsmgqlphtvswfthpslmlgsgvpghpaaiphpaivppsgkqelqpfdrnlktqaeskaekeak kptikkplnafmlymkemrakviaectlkesaainqilgrrwhalsreeqakyyelarkerqlhmqlypgwsard nygkkkrrsrekhqesttdpgspkkcrarfglnqqtdwcgpcr$

583/2682 FIGURE 533A

ATGAACCTCTGAAAACTGCCGGCATCTGAGGTTTCCTCCAAGGCCCTCTGAAGTGCAGCCCATA**ATG**AAGGTCTT GGCGGCAGGAGTTGTGCCCCTGCTGTTGGTTCTGCACTGGAAACATGGGGCGGGGAGCCCCCTCCCCATCACCCC TGTCAACGCCACCTGTGCCATACGCCACCCATGTCACAACAACCTCATGAACCAGATCAGGAGCCAACTGGCACA GCTCAATGGCAGTGCCAATGCCCTCTTTATTCTCTATTACACAGCCCAGGGGGAGCCGTTCCCCAACAACCTGGA CAAGCTATGTGGCCCCAACGTGACGGACTTCCCGCCCTTCCACGCCAACGGCACGGAGAAGGCCAAGCTGGTGGA GCTGTACCGCATAGTCGTGTACCTTGGCACCTCCCTGGGCAACATCACCCGGGACCAGAAGATCCTCAACCCCAG TGCCCTCAGCCTCCACAGCAAGCTCAACGCCACCGCCGACATCCTGCGAGGCCTCCTTAGCAACGTGCTGTGCCG CCTGTGCAGCAAGTACCACGTGGGCCATGTGGACGTGACCTACGGCCCTGACACCTCGGGTAAGGATGTCTTCCA GAAGAAGAAGCTGGGCTGTCAACTCCTGGGGAAGTATAAGCAGATCATCGCCGTGTTGGCCCAGGCCTTC**TAG**CA GGAGGTCTTGAAGTGTGCTGTGAACCGAGGGATCTCAGGAGTTGGGTCCAGATGTGGGGGCCTGTCCAAGGGTGG CTGGGGCCCAGGGCATCGCTAAACCCAAATGGGGGCTGCTGGCAGACCCCGAGGGTGCCTGGCCAGTCCACTCCA CTCTGGGCTGGGCTGTGATGAAGCTGAGCAGAGTGGAAACTTCCATAGGGAGGAGCTAGAAGAAGGTGCCCCTT CCTCTGGGAGATTGTGGACTGGGGAGCGTGGGCTGGACTTCTGCCTCTACTTGTCCCTTTGGCCCCTTTGCTCACT TTGTGCAGTGAACAAACTACACAAGTCATCTACAAGAGCCCTGACCACAGGGTGAGACAGCAGGGCCCAGGGGAG TGGACCAGCCCCAGCAAATTATCACCATCTGTGCCTTTGCTGCCCCTTAGGTTGGGACTTAGGTGGGCCAGAGG GGCTAGGATCCCAAAGGACTCCTTGTCCCCTAGAAGTTTGATGAGGAGAGATAGAGAGGGGCCTCTGGGATGGA AGGCTGTCTTCTTTTGAGGATGATCAGAGAACTTGGGCATAGGAACAATCTGGCAGAAGTTTCCAGAAGGAGGTC GGCCTGGAAAGCTTTGGTAGGTTCTTCGTTCTCTCCCGTGATCTTCCCTGCAGCCTGGGATGGCCAGGGTCTG ATGGCTGGACCTGCAGCAGGGGTTTGTGGAGGTGGGTAGGGCAGGGCAGGTTGCTAAGTCAGGTGCAGAGGTTC TGAGGGACCCAGGCTCTTCCTCTGGGTAAAGGTCTGTAAGAAGGGGCTGGGGTAGCTCAGAGTAGCAGCTCACAT CTGAGGCCCTGGGAGGTCTTGTGAGGTCACACAGAGGTACTTGAGGGGGACTGGAGGCCGTCTCTGGTCCCCAGG GCAAGGGAACAGCAGAACTTAGGGTCAGGGTCTCAGGGAACCCTGAGCTCCAAGCGTGCTGTGCGTCTGACCTGG CATGATTCTATTTATTATGATATCCTATTTATATTAACTTATTGGTGCTTTCAGTGGCCAAGTTAATTCCCCTT TCCCTGGTCCCTACTCAACAAAATATGATGATGGCTCCCGACACAAGCGCCCAGGGCCTAGCAGGGCCTG GTCTGGAAGTCGACAATGTTACAAGTGGAATAAGCTTACGGGTGAAGCTCAGAGAAGGGTCGGATCTGAGAGAAT GGGGAGGCCTGAGTGGGGGGGCCTTGCTCCACCCCCATCCCCTACTGTGACTTGCTTTAGCGTGTCAGGG TCCAGGCTGCAGGGGCTGGGCCAATTTGTGGAGAGGCCGGGTGCCTTTCTGTCTTGCTTCCAGGGGGCTGGTTCA CACTGTTCTTGGGCGCCCCAGCATTGTGTTGTGAGGCGCACTGTTCCTGGCAGATATTGTGCCCCCTGGAGCAGT GGGCAAGACAGTCCTTGTGGCCCACCCTGTCCTTGTTTCTGTGTCCCCATGCTGCCTCTGAAATAGCGCCCTGGA ACAACCCTGCCCCTGCACCCAGCATGCTCCGACACAGCAGGGAAGCTCCTCCTGTGGCCCGGACACCCATAGACG GTGCGGGGGCCTGGCTGGCCAGACCCCAGGAAGGTGGGGTAGACTGGGGGGATCAGCTGCCCATTGCTCCCAA GAGGAGGAGGGGGGGCTGCAGACGCCTGGGACTCAGACCAGGAAGCTGTGGGCCCTCCTGCTCCACCCCATCC AACGCCCTCCAGTCTGAGAGCAGGGGAGGGAAGGAGGCAGCAGCAGTTGGGGCAGCTGCTCAGAGCAGTGTTCTGG CTTCTTCTCAAACCCTGAGCGGGCTGCCGGCCTCCAAGTTCCTCCGACAAGATGATGGTACTAATTATGGTACTT GTCCTGAGGCCTGGGGTTGGGGTGGAGGGTGCGGCCCGGAGTTGTCCATCTGTCCATCCCAACAGCAAGACGAGG CGGCTTAGCTTGGGGCTGGCTGCATTCCCCCAGGATGGGCTTCGAGAAAGACAAACTTGTCTGGAAACCAGAGTT GCTGATTCCACCGGGGGGCCCGGCTGACTCGCCCATCACCTCATCTCCCTGTGGACTTGGGAGCTCTGTGCCAG GCTCCCTCCAGATCCCGTCCGGCAGCTTGGCGTCCACCCTGCACAGCATCACTGAATCACAGAGCCTTTGCGTGA AACAGCTCTGCCAGGCCGGGAGCTGGGTTTCTCTCTCCCTTTTTATCTGCTGGTGTGGACCACACCTGGGCCTGGC CTGCTAGTTTACTTGTCTCCTCCCCATCGTCCCCATCGTCCTCCTTGTCCCTGACTTGGGGCACTTCCACCCT GACCCAGCCAGTCCAGCTCTGCCTTGCCGCTCTCCAGAGTAGACATAGTGTGTGGGGGTTGGAGCTCTGGCACCC GGGGAGGTAGCATTTCCCTGCAGATGGTACAGATGTTCCTGCCTTAGAGTCATCTCTAGTTCCCCACCTCAATCC

584/2682 FIGURE 533B

585/2682 FIGURE 534

 $\label{thm:lmq} \begin{tabular} MKVLAAGVVPLLLVLHWKHGAGSPLPITPVNATCAIRHPCHNNLMNQIRSQLAQLNGSANALFILYYTAQGEPFP\\ NNLDKLCGPNVTDFPPFHANGTEKAKLVELYRIVVYLGTSLGNITRDQKILNPSALSLHSKLNATADILRGLLSN\\ VLCRLCSKYHVGHVDVTYGPDTSGKDVFQKKKLGCQLLGKYKQIIAVLAQAF\\ \end{tabular}$

586/2682 FIGURE 535

TAGGATGGAAAGGCAGATGTAAAGTCCCTCATGCGAAATATAACACGGGGGGCAACCCGACAGAGGATGTCTCA AACCAAGGAAATGCCAGCCCTCCTGCAGGACCCAGCAATGTACCTAAGTTTGGGTCCCCAAAGCCACCTGTGGCA GTCAAACCTTCTTCTGAGGAAAAGCCTGACAAGGAACCCAAGCCCCCGTTTCTAAAGCCCACTGGAGCAGGCCAA AGATTCGGAACACCAGCCAGCTTGACCACCAGAGACCCCGAGGCGAAAGTGGGATTTCTGAAACCTGTAGGCCCC AAGCCCATCAACTTGCCCAAAGAAGATTCCAAACCTACATTTCCCTGGCCTCCTGGAAACAAGCCATCTCTTCAC AGTGTAAACCAAGACCATGACTTAAAGCCACTAGGCCCGAAATCTGGGCCTACTCCTCCAACCTCAGAAAATGAA CAGAAGCAAGCGTTTCCCAAATTGACTGGGGTTAAAGGGAAATTTATGTCAGCATCACAAGATCTTGAACCCAAG CCCCTCTTCCCCAAACCCGCCTTTGGCCAGAAGCCGCCCTAAGTACCGAGAACTCCCATGAAGACGAAAGCCCC ATGAAGAATGTGTCTTCATCAAAAGGGTCCCCAGCTCCCCTGGGAGTCAGGTCCAAAAGCGGCCCTTTAAAACCA GCAAGGGAAGACTCAGAAAATAAAGACCATGCAGGGGAGATTTCAAGTTTGCCCCTTTCCTGGAGTGGTTTTGAAA GCTAAGAACACCTTCCAGAGCAAAATAAATCAGGAAGAGTTGGCCTCAGGGGACTCCTCCTGCCAGGTTCCCTAAG GCCCCTTCTAAGCTGACAGTGGGGGGGCCATGGGGCCAAAGTCAGGAAAAGGAAAAGGGAGACAAGAATTCAGCC ACCCCGAAACAGAAGCCATTGCCTCCCTTGTTTACCTTGGGTCCACCTCCACCAAAACCCAACAGACCACCAAAAT GTTGACCTGACGAAATTCCACAAAACCTCTTCTGGAAACAGTACTAGCAAAGGCCAGACGTCTTACTCAACAACT TCCCTGCCACCACCTCCACCATCCGTCCGGCCAGCCAACCACCATTGCCAGCATCTCACCCATCACAACCACCA GTCCCAAGCCTACCTCCCAGAAACATTAAACCTCCGTTTGACCTAAAAAGCCCTGTCAATGAAGACAATCAAGAT GGTGTCACGCACTCTGATGGTGCTGGAAATCTAGATGAGGAACAAGACAGTGAAGGAGAAACATATGAAGACATA GAAGCATCCAAAGAAAGAGAGAAAAAGGGAAAAAGGAAAAAGAAGAGGTTAGAGCTGGAGAAAAAAGGAACAG CGCATCACAGACAACCCAGAAGGAAAATGGTTGGGCAGAACAGCAAGGGGTTCATATGGCTATATTAAAACAACT GCTGTAGAGATTGACTATGATTCTTTGAAACTGAAAAAAGACTCTCTTGGTGCCCCTTCAAGACCTATTGAAGAT GACCAAGAAGTATATGATGATGTTGCAGAGCAGGATGATATTAGCAGCCACAGTCAGAGTGGAAGTGGAGGGATA TTCCCTCCACCAGATGATGACATTTATGATGGGATTGAAGAGGGAAGATGCTGATGATGGTTTCCCTGCTCCT CCTAAACAATTGGACATGGGAGATGAAGTTTACGATGATGTGGATACCTCTGATTTCCCTGTTTCATCAGCAGAG ATGAGTCAAGGAACTAATTTTGGAAAAGCTAAGACAGAAGAAAAAGGACCTTAAGAAGCTAAAAAAAGCAGGAAAAA GAAGAAAAAGACTTCAGGAAAAAATTTAAATATGATGGTGAAATTAGAGTCCTATATTCAACTAAAGTTACAACT TCCATAACTTCTAAAAAGTGGGGAACCAGAGATCTACAGGTAAAACCTGGTGAATCTCTAGAAGTTATACAAACC ACAGATGACACAAAAGTTCTCTGCAGAAATGAAGAAGGGAAATATGGTTATGTCCTTCGGAGTTACCTAGCGGAC AATGATGGAGAGATCTATGATGATATTGCTGATGGCTGCATCTATGACAATGAC<u>TAG</u>CACTCAACTTTGGTCATT

587/2682 FIGURE 536

MAKYNTGGNPTEDVSVNSRPFRVTGPNSSSGIQARKNLFNNQGNASPPAGPSNVPKFGSPKPPVAVKPSSEEKPD KEPKPPFLKPTGAGQRFGTPASLTTRDPEAKVGFLKPVGPKPINLPKEDSKPTFPWPPGNKPSLHSVNQDHDLKP LGPKSGPTPPTSENEQKQAFPKLTGVKGKFMSASQDLEPKPLFPKPAFGQKPPLSTENSHEDESPMKNVSSSKGS PAPLGVRSKSGPLKPAREDSENKDHAGEISSLPFPGVVLKPAASRGGLGLSKNGEEKKEDRKIDAAKNTFQSKIN QEELASGTPPARFPKAPSKLTVGGPWGQSQEKEKGDKNSATPKQKPLPPLFTLGPPPPKPNRPPNVDLTKFHKTS SGNSTSKGQTSYSTTSLPPPPPSHPASQPPLPASHPSQPPVPSLPPRNIKPPFDLKSPVNEDNQDGVTHSDGAGN LDEEQDSEGETYEDIEASKEREKKREKEEKKRLELEKKEQKEKEKKEQEIKKKFKLTGPIQVIHLAKACCDVKGG KNELSFKQGEQIEIIRITDNPEGKWLGRTARGSYGYIKTTAVEIDYDSLKLKKDSLGAPSRPIEDDQEVYDDVAE QDDISSHSQSGSGGIFPPPPDDDIYDGIEEEDADDGFPAPPKQLDMGDEVYDDVDTSDFPVSSAEMSQGTNFGKA KTEEKDLKKLKKQEKEEKDFRKKFKYDGEIRVLYSTKVTTSITSKKWGTRDLQVKPGESLEVIQTTDDTKVLCRN EEGKYGYVLRSYLADNDGEIYDDIADGCIYDND

588/2682 FIGURE 537A

CGAAGAGGATCCGGAGCAGCTGCTGCCAGCCCGCGGGCACTGAAGTCCTCCCGGCTGCCGCTCGAGTAGCCACGG GCGCGATCGGGACCAGAAGTCTCCTCCATGATCACTTTGGAAGCCGGGGGGAAGACTTTGCCCTGCCCTGA GAGCTGGTCTGCGTTTCCCAGGCGGCGGCGGCGGCGGAGCAGCAGCTGCAGCAGCCGAGTCCAAATAGGAGCGGCC ACAGCCAGGGGCGTGTGCGCCCCGCGGGGGCGAGCTCGGGTTCCCCTCGGAATGTCCCCGGGGCGCCCCGGCGCG TCCTGGCTCCTGGGCAGTGGGGAAGCCCCCGGGGGCGAGTGACCTCAGCTGGCCACGACCCAGCCCTCCCCCGTG CGTATCTCGCTTAAGATGGCAGCGGAGTCAGGGGAACTAATCGGGGCTTGTGAGTTCATGAAAGATCGGTTATAT TTTGCTACTTTAAGGAATAGACCAAAAAGCACAGTAAATACCCACTATTTCTCCATCGATGAGGAGCTGGTCTAT GAAAATTTCTATGCAGATTTTGGACCGCTGAACTTGGCAATGGTGTACAGATATTGCTGCAAACTAAACAAGAAA CTAAAATCATACAGTTTGTCAAGAAAGAAAATAGTGCACTACACCTGTTTTGACCAACGGAAAAGAGCAAATGCA GCATTTTTGATAGGTGCCTATGCAGTAATCTATTTAAAGAAGACACCAGAAGAAGCCTACAGAGCACTCCTGTCT GGCTCAAACCCCCCTATCTTCCATTCAGGGATGCTTCCTTTGGAAATTGCACTTACAATCTCACCATTCTCGAC TGTTTGCAGGGAATCAGAAAGGGATTACAACATGGATTTTTTGACTTTGAGACATTTGATGTGGATGAATATGAA CATTATGAGCGAGTTGAAAATGGTGACTTCAACTGGATTGTTCCAGGAAAATTTTTAGCATTTAGTGGACCACAT CCTAAAAGCAAAATTGAGAATGGTTATCCTCTTCACGCCCCTGAAGCCTACTTTCCTTATTTCAAAAAGCATAAT GTGACTGCAGTTGTGAGGCTAAACAAAAAGATTTATGAGGCAAAGCGCTTCACAGACGCTGGCTTCGAGCACTAT GACCTCTTCTTCATAGATGGCAGCACCCCAGTGACACATCGTGCGAAGGTTCCTGAACATCTGTGAGAACACCC GAAGGGGCCATCGCCGTTCACTGCAAAGCTGGTCTTGGAAGAACAGGGACATTGATAGCCTGTTATGTAATGAAA CACTACAGGTTTACACATGCTGAAATAATTGCTTGGATTAGAATATGCCGGCCAGGCTCTATTATAGGACCCCAG CAGCACTTCCTGGAAGAAAAACAAGCATCGTTGTGGGTCCAAGGAGACATTTTCCGATCCAAACTGAAAAATCGA CCATCCAGTGAAGGAAGTATTAATAAAATTCTTTCTGGCCTAGATGATATGTCTATTGGTGGAAATCTTTCAAAA ACACAAAACATGGAACGATTTGGAGAGGATAACTTAGAAGATGATGATGTGGAAATGAAAAATGGTATAACCCAG GGAGACAACTACGTGCCTTAAAAAGTCAGAGACAGCCACGTACCTCACCATCCTGTGCATTTAGGTCAGATGAT ACAAAAGGACATCCAAGAGCAGTGTCCCAGCCTTTCAGATTAAGTTCATCCCTGCAAGGATCTGCAGTTACTTTG AAGACATCAAAAATGGCACTGTCCCCTTCAGCAACGGCCAAGAGGATCAACAGAACTTCTTTGTCTTCGGGTGCC ACTGTAAGAAGCTTTTCCATAAACTCCCGGCTAGCCAGTTCTCTAGGGAACTTGAATGCTGCAACAGATGATCCA TCCCAGCCAACTACCAGAAATTACCCTGAGCTCAACAATAATCAGTACAACAGAAGCAGCAACAGCAACGGGGGGC GGGCTTTCTTCTTCTCAGCGAGATTCCTGAGCCGTTCTATCCCTTCCCTTCAGTCTGAATATGTTCATTACTAA GGCCTTGCCACTCCAGTGAAAGCTGTTCTTCTCTTAGACACAATTTCTTCATCTGGACGAGCAGTGGAGAGGGAA AGCAACTTCTTGCTGGAAGAATATCTCTGCCTTCTTACCTTAAATTAAAAAGAGCACTAAGATAACACCTTCAAG AGACTTGAAAACAGAAAACTGGTTAATGACTACTATAAATGCACTGAAACTATGTTATGGAGATTTCCATACTTT TAAAGACAGTTTTAATGTTGAATTTTGGTATTTTGAAGGGTTATTTTTAATGTATTTTGGTAATACATTTATTATT **ATATTTACATGTACAGTGTTACATTATATATGTATTGTGAACTTTTAAAAGACTATTTTGATAAATTTATAAATAT ATAAAATTATGTAAAAACTACACTATATTTTGATTTAGATTTTCCTGCTGTTTTGCTACCAAAAATTTGTATTTTA** AAGTTTTTAGAAAGTGATTTTTATGCTCGCACTATAAATATGGCAGGTCAGTTCATTCTTTTGGGAAGTCAGTTT AGTTACACTGAGTTTATCCAAGTTTATCTCTACCAAGAGTATAATGGCATGGGATGGCTTATTTAGGACAATTCC GTGAAAGATCAGAATTCACTGAATATTTCTTCTGAGAGCATGGTTTCATGGTTTTTCTCTATGAAATGACTCAAT ATTCCAAATGTTTTTTTTTCCTTCCTCCTTTCAAAAGAGTTCTTAACCCAATTAGGATATCCTGCTTTGGGTATG AGGTTGTTGTTGCCTGTAATCACACATGGTTTGACATCAGTTTTAAATCAATGGAGAGAAAAAACTGAAAAAGAT GCTGCTAAGTAGTTCTCTGTATTAAAGGAGATATTTTTAAAACAGGGTACAACCCCCTGCTGCACACGCTAGCAT ATCTGGAACCTACTATGAAAATGAAAGGACCCTTATAGGTACTCACAGCCCTTTCATGTAAGTATGATCTGATAT TTAGGTCTTCAGAAGCCTGTAGGTTTCATTTCTATGAGGAATCGAGGAGCGTTACATCCTGATATCCTTCCAGGC TGCTTAAGAATGGACTGCTTCGACACTGAAAGTGCTAGTTAAATGGATTCATATGAAGTGCTTTACTCCCAACCA TTGAGTTATTTATAATGTATTTATTAGGGGAGGGTACCTTGAGTCTATTATATATGCTTCATCAAAACATCTTGT

589/2682 FIGURE 537B

590/2682 FIGURE 538

MAAESGELIGACEFMKDRLYFATLRNRPKSTVNTHYFSIDEELVYENFYADFGPLNLAMVYRYCCKLNKKLKSYS LSRKKIVHYTCFDQRKRANAAFLIGAYAVIYLKKTPEEAYRALLSGSNPPYLPFRDASFGNCTYNLTILDCLQGI RKGLQHGFFDFETFDVDEYEHYERVENGDFNWIVPGKFLAFSGPHPKSKIENGYPLHAPEAYFPYFKKHNVTAVV RLNKKIYEAKRFTDAGFEHYDLFFIDGSTPSDNIVRRFLNICENTEGAIAVHCKAGLGRTGTLIACYVMKHYRFT HAEIIAWIRICRPGSIIGPQQHFLEEKQASLWVQGDIFRSKLKNRPSSEGSINKILSGLDDMSIGGNLSKTQNME RFGEVSFP

591/2682 FIGURE 539

592/2682 FIGURE 540

 ${\tt MCCTKSLLLAALMSVLLLHLCGESEAASNFDCCLGYTDRILHPKFIVGFTRQLANEGCDINAIIFHTKKKLSVCA} \\ {\tt NPKQTWVKYIVRLLSKKVKNM}$

593/2682 FIGURE **541**

CTCAGCGGGGGGGCGGCTCTTCGCGTCCCTGGCCGTAATTTTGCACGATGGCAGTCAAATGAGAGCAAAAGCA TTTCCAGAAACCAGAGATTATTCTCAACCTACTGCAGCAGCAACAGTACAGGACATAAAAAAACCTGTCCAGCAA ACAGTAAAAATTCCAACAACTACCCCAGCAACTACAAAAAAACACTGCAACCACCAGCCCAATTACCTACACCTG GTCACAACCCAGGCCACACCCAACAACTCACACACACCTCCTCCAGTTACTGAAGTTACAGTCGGCCCTAGCTTA GCCCCTTATTCACTGCCACCCACCATCACCCACCAGCTCATACAGCTGGAACCAGTTCATCAACCGTCAGCCAC ACAACTGGGAACACCACTCAACCCAGTAACCAGACCACCCTTCCAGCAACTTTATCGATAGCACTACAAAAAGC ACAACCGGTCAGAAGCCTGATCAACCCACCCATGCCCCAGGAACAACGGCAGCTGCCCACAATACCACCCGCACA GTTCTAAACGGAAGCAGACTCTGTATAAAAGCAGAGATGGGGATACAGCTGATTGTTCAAGACAAGGAGTCGGTT TTTTCACCTCGGAGATACTTCAACATCGACCCCAACGCAACGCATGTGGGAACTGTGGCACCCGAAAATCC AACCTTCTGTTGAATTTTCAGGGCGGATTTGTGAATCTCACATTTACCAAGGATGAAGAATCATATTATATCAGT GAAGTGGGAGCCTATTTGACCGTCTCAGATCCAGAGACAGTTTACCAAGGAATCAAACATGCGGTGGTGATGTTC CAGACAGCAGTCGGGCATTCCTTCAAGTGCGTGAGTGAACAGAGCCTCCAGTTGTCAGCCCACCTGCAGGTGAAA ACAACCGATGTCCAACTTCAAGCCTTTGATTTTGAAGATGACCACTTTGGAAATGTGGATGAGTGCTCGTCTGAC CGCCTAAGGTGTCAATCATCTGGATACCAGAGAATCTAATTGTTGCCCGGGGGGAATGAAAATAATGGAATTTAG AGAACTCTTCATCCCTTCCAGGATGGATGTTGGGAAATTCCCTCAGAGTGTGGGTCCTTCAAACAATGTAAACC ACCATCTTCTATTCAAATGAAGTGAGTCATGTGTGATTTAAGTTCAGGCAGCACATCAATTTCTAAATACTTTTT GTTTATTTATGAAAGATATAGTGAGCTGTTTATTTTCTAGTTTCCTTTAGAATATTTTAGCCACTCAAAGTCAA CATTTGAGATATGTTGAATTAACATAATATGTAAAGTAGAATAAGCCTTCAAATTATAAACCAAGGGTCAATT GTAACTAATACTACTGTGTGTGCATTGAAGATTTTATTTTACCCTTGATCTTAACAAAGCCTTTGCTTTGTTATC TGGCACGATCTCGGCTTATGGCAACCTCCGCCTCCCGGGTTCAAGTGATTCTCCTGCTTCAGCTTCCCGAGTAGC TGGGATTACAGGCACACACTACCACGCCTGGCTAATTTTTGTATTTTTATTATAGACGGGTTTCACCATGTTGGC CAGACTGGTCTTGAACTCTTGACCTCAGGTGATCCAGCCACCTCAGCCTCCCAAAGTGCTGGGATTACAGGCATG AGCCATTGCGCCCGGCCTTAAATGTTTTTTTTAATCATCAAAAAAGAACAACATATCTCAGGTTGTCTAAGTGTTT TTATGTAAAACCAACAAAAAGAACAAATCAGCTTATATTTTTTATCTTGATGACTCCTGCTCCAGAATTGCTAGA CTAAGAATTAGGTGGCTACAGATGGTAGAACTAAACAATAAGCAAGAGACAATAATAATGGCCCTTAATTATTAA . CAAAGTGCCAGAGTCTAGGCTAAGCACTTTATCTATATCTCATTTCATTCTCACACACTTATAAGTGAATGAGTAA ACTGAGACTTAAGGGAACTGAATCACTTAAATGTCACCTGGCTAACTGATGGCAGAGCCAGAGCTTGAATTCATG TTGGTCTGACATCAAGGTCTTTGGTCTTCTCCCTACACCAAGTTACCTACAAGAACAATGACACCACACTCTGCC TGAAGGCTCACACCTCATACCAGCATACGCTCACCTTACAGGGAAATGGGTTTATCCAGGATCATGAGACATTAG GGTAGATGAAAGGAGAGCTTTGCAGATAACAAAATAGCCTATCCTTAATAAATCCTCCACTCTTGGAAGGAGAC TGAGGGGCTTTGTAAAACATTAGTCAGTTGCTCATTTTTATGGGATTGCTTAGCTGGGCTGTAAAGATGAAGGCA GTATAGCCCCATCTTGTGGTAACTTGCTGCTTCTGCACTTCATATCCATATTTCCTATTGTTCACTTTATTCTGT AGAAAAGTCCACATAACCCTAGAATTCTTAGTCAAGGAATAATTCAAGTCAGCCTAGAGACCATGTTGACTTTCC TCATGTGTTTCCTTATGACTCAGTAAGTTGGCAAGGTCCTGACTTTAGTCTTAATAAAACATTGAATTGTAGTAA **AGGTTTTTGCAATAAAAACTTACTTTGG**

594/2682 FIGURE 542

MPRQLSAAAALFASLAVILHDGSQMRAKAFPETRDYSQPTAAATVQDIKKPVQQPAKQAPHQTLAARFMDGHITF QTAATVKIPTTPATTKNTATTSPITYTLVTTQATPNNSHTAPPVTEVTVGPSLAPYSLPPTITPPAHTAGTSSS TVSHTTGNTTQPSNQTTLPATLSIALHKSTTGQKPDQPTHAPGTTAAAHNTTRTAAPASTVPGPTLAPQPSSVKT GIYQVLNGSRLCIKAEMGIQLIVQDKESVFSPRRYFNIDPNATQASGNCGTRKSNLLLNFQGGFVNLTFTKDEES YYISEVGAYLTVSDPETVYQGIKHAVVMFQTAVGHSFKCVSEQSLQLSAHLQVKTTDVQLQAFDFEDDHFGNVDE CSSDYTIVLPVIGAIVVGLCLMGMGVYKIRLRCQSSGYQRI

595/2682 FIGURE **543**

AGCATCGCGCGCAAGGCCTGCCGGTTGCTCGGGGTCGTATGACGCACTTTTCCAGCTCGAGCCCTCACGAGGCCG TGGGTACGACCGGAAGCCGCAGACTGAATCTCGCTCTGTTGCCCAGCCCATCTCGGCCCACTGAAACCTCCACCT TGCTGATCCCATTTTCAATGAAGAATTGCTTCCAGTTACTTTGTAACTGCCAGGTCCCAGCAGCTGGCTTTAAAA AAACAGTAAAAAATGGGCTCATTTTACAGTCAATTTCCAATGATGTCTATCAAAATCTGGCTGTGGAAGACTGGA TCCATGACCATATGAATCTAGAAGGCAAACCAATTCTATTCTTTTGGCAGAATTCTCCCTCTGTTGTAATTGGTA GGCATCAAAATCCTTGGCAGGAATGTAACCTGAATCTAATGAGAGAAGAAGGTATAAAACTGGCTCGGAGAAGAA GAATGGAAAATCTGAAATTAATTGTGAGAGCTCTGAATGCTGTCCAACCCCAGCTGGATGTGCAGGCTACCAAAA GATTTGACCTTTTACTTGATGGACAGTTTAAAATCTCAGGAACAGCTTCTAAGATCGGCCGGACTACTGCCTATC ACCATTGCACTTTATTATGTAGTACTGATGGGACGTTCTTGTCTTTGCTAAAGAGCCCTTACCAAGGGATCA GGAGCAATGCCACTGCTAGCATACCTTCCTTAGTGAAAAATCTTTTGGAAAAGGATCCCACTCTGACCTGTGAAG TACTAATGAATGCTGCTGCTACAGAGTATGCTGCTTATCATCAAATTGATAATCACATTCACCTAATAAACCCAA CGGATGAGACACTGTTTCCTGGAATAAATAGCAAAGCCAAAGAACTGCAAACTTGGGAGTGGATATATGGCAAAA CTCCAAAGTTTAGTATAAATACTTCCTTTCATGTGTTATATGAACAGTCACACTTGGAAATTAAAGTATTCATAG ACATAAAGAATGGAAGAATTGAAATTTGTAATATTGAAGCACCTGATCATTGGTTGCCATTGGAAATACGTGACA **AATTAAATTCAAGTCTTATTGGCAGTAAGTTTTGCCCAACTGAAACTACCATGCTAACAAATATATTACTTAGAA** CATGTCCACAAGACCACAAACTAAACAGTAAATGGAATATTCTCTGTGAAAAAATTAAGGGAATAATGTGATTCC AAGTAAATGTCTTAATACAGTTTCAATTAGAAAATAAAATGTCTCATACTTGCACATTGTATGTC

596/2682 FIGURE 544

MLIPFSMKNCFQLLCNCQVPAAGFKKTVKNGLILQSISNDVYQNLAVEDWIHDHMNLEGKPILFFWQNSPSVVIG RHQNPWQECNLNLMREEGIKLARRRSGGGTVYHDMGNINLTFFTTKKKYDRMENLKLIVRALNAVQPQLDVQATK RFDLLLDGQFKISGTASKIGRTTAYHHCTLLCSTDGTFLSSLLKSPYQGIRSNATASIPSLVKNLLEKDPTLTCE VLMNAVATEYAAYHQIDNHIHLINPTDETLFPGINSKAKELQTWEWIYGKTPKFSINTSFHVLYEQSHLEIKVFI DIKNGRIEICNIEAPDHWLPLEIRDKLNSSLIGSKFCPTETTMLTNILLRTCPQDHKLNSKWNILCEKIKGIM

597/2682 FIGURE 545A

GCGGGGAGCCGGCGGTTATCTGGGCGGCGGAGCGCTCACAATGTGGCAGGAGACAGAAAAGATAAGATGCTCCCA AGTCCCTTGCAGCTCTCTCAGAAGAAAAATCACTAGTGCTCTGCTCTTGCCATAATACCAAACCTTTTTGACTC ATGCTTTGGTGCTGCAACACTGGAAGAATTGCACACAGTTTCCAGGAATATCTTTTTTTCATTTGAGTGATTCTT TGTGGATGAGAAAAGATTTGAGTCTTAATAATTACCTTGTTTTAAAGCTATTTCTTTATAGTCTGAACTGTTTAA TAAATTGGGCCACTTACCAATGAGCCACACAGCCAGTTCTTGTCAGGAGCTGGTTGAAAACTGTGCTGTGCATGT TGACCTGTCCACCAAAGTGTACAAAAGGGAATCAGGAAGTCCTTATTCTGTGTTAGTGGACACCAAGATGAGCAA ACCGCATCTCCATGAAACAGAACAGCCATATTTCAGGGAGACAAGAGCAGTGTCTGACGTGCATGCTGTTAA GGAAGACCGGGAGAATTCTGATGACACAGAGGAGGAAGAAGAGAGTCTCTTACAAAAGGGAGCAGATCATAGT GGAGGTAAACCTTAATAATCAAACATTAAATGTATCTAAAGGGGAAAAGGGTGTCTCTTCTCAGTCCAAAGAGAC TCCTGTTCTTAAGACAAGCAGTGAGGAAGAGAGGAAGAGGGAAGAGGCCACAGATGACAA TGGAGAGAATGAAAAGCAGAAGAAAAAGGAGAGATAGTAGAGAAAGTCAGCGTTACACAAAGGAGAACCAGGAG AGCTGCCTCTGTTGCCGCAGCTACCACTTCCCCTACTCCCAGAACTACAAGAGGTCGTAGGAAGAGTGTAGAGCC ACCTAAGCGTAAGAAGCGGCCACAAAGGACCCCAAAGCACCAGTCCAGAAAGCTAAGTGTGAAGAGAAAGACAC TCTGACCTGTGAGAAGTGCCCCAGGGTATTTAACACTCGCTGGTACCTGGAGAAGCACATGAACGTTACTCATAG GCGCATGCAGATTTGTGATAAATGTGGCAAGAAGTTTGTCCTGGAAAGTGAGCTGTCCCTTCACCAGCAAACAGA CTGTGAAAAAAACATTCAGTGTGTTTCCTGTAACAAATCGTTCAAGAAACTCTGGTCCCTTCATGAACATATCAA GATCGTCCATGGATATGCAGAAAAGAAATTTTCCTGTGAAATTTGTGAGAAGAAATTCTATACCATGGCTCATGT GCGGAAACACATGGTTGCACACACAAAAGACATGCCATTTACATGCGAAACCTGTGGAAAATCATTCAAACGCAG TATGTCACTCAAGGTGCACTCCTTGCAGCATTCTGGAGAGAGCCCTTTAGATGCGAGAACTGTGACGAAAGGTT TCAGTACAAGTACCAGCTACGCTCCCACATGAGCATTCATATTGGGCACAAACAGTTCATGTGCCAGTGGTGTGG AATCTGTGGCAAAAGCTTCACCAGCCGCCCCAACATGAAGAGACACCGCAGAACTCACACAGGCGAGAAGCCCTA TCCATGTGATGTGTGTGGCCAGCGGTTCCGCTTCTCGAACATGCTTAAGGCCCACAAGGAAGTGCTTTCGGGT GACCAGCCCGTGAATGTGCCACCTGCTGTCCAGATCCCACTTACAACTTCCCCAGCCACCCCAGTTCCTTCTGT GGTGAACACAGCCACAACCCCAACCCCTCCAATCAATATGAATCCTGTAAGCACTCTTCCCCCTCGGCCCATCCC CCACCCCTTCTCACACCTGCACATCCACCCACACCCTCACCACCACACCATCCCATCCCTCCAGTCCCTCA CCTCCCGCCACCTCCAGCTCTCTTTAAGAGTGAGCCTTTAAATCATAGAGGCCAGAGTGAGGACAACTTTCTGCG GCACCTGGCAGAGAAGAACAGTTCAGCACAGCATCATTAACATCCGTCTCCTTAGTGTGTTCTCCAGGAGACACG TCCCCATGTGTGAGCGTGCACAGAGGGGAGTCGGTGAGCATTTCCTTAGTTCTCAGACTCTCCTCCGCCTCTACCA AGAGCTTCGCCAGTGTCACTGAATCAACAGATCCAAGGGAATGAACAAGAAGACTACCTTGAGCTCACAGAGGGA TCCTCAAAGAGGGGATAGGCCTGGTTTCCTTTGTACTAATCGGGAAGGCTGTGAGATTAATCCAGAGCATTAATT GTATCACTGTGTATGGTAAGGAATTCTTTTCAGCTTTTGGTGCCAGCTACAGAGTTGAGCTGGCCATGTTTCACA GTATATCAAGCATTATAGAGAAAGACAGAAATTTTCTTCTTTTTGTGTAGCTCTCCTAACGCACTCTTTATTTTACT ACAGAAATTATTTAGAGTTTTTGTATAGACTTCTTTGGTAGTCTGTTTCTAAAATGAAATGTATTTCAATAAGC AGTGTAATTTTTTCAGTGTAGCTGAACCTATGTTGTAAAATAGAAAAAATTTTTATAATCATCAAAATGTGATT CTTAAAGATGCATATAACTTCTATAATTCAAAGCTATTCTTACATCCGTACAACTCAAAAGGTGCTTCAGAGACT AGATGTATCTGAGAGGGTCTCCAGACCAGGTTACTGCAAAAATGAGGTTTTGCTTTCAGGATTTGGCGTAAATAC TTGGTAGTTTTGACATCTCTGCTTAACACTCAAGAGAGGCTCCCTAATGTGCTCCTGTCCTCCATGTTCTGCTTG GCTTCGTTAGTGCATTACATGAAATGATTTGCAGGGGATGGGGCCTTTTCCAGGGAAGTCACCTAAAGCTTGCAT GTTTTGAAAATTTGAATAAGGCTGTTTGCTGACAGGAGGAGGAAGTAGTGGAGATCATTTCATCTCAGTCACGTC TGTTTCTCACTTCCCTTAGGAATTGTGTTGATGTTTAACTTTTATGGGATGACAAATTGAAATCGCTCATTTTGA GGTTGCTTTATTTTCTAGAATTGTTATAAGAAGCTAAAATAGTAAACTTAAAATCACAAACATGACATTGCTGA TAGTGGCTGAGAAATTCAGATGAGAAGACAAATTGGTTATGAATTTTGAAATATCTATTATATGTAAAATGTGGA TATGTTCACAACCTTGAGCTATTTTAACACAGTTTAAATATAGTGAGGGAAAACTCCTAAGTTTTACTGCCCTGT CCTCTGCAAATTATGTAATACCAGCATTCTTAGGCGATAAAGAGAGCAGCACCTCTAGTACCTTTAGGCAGATTA

598/2682 FIGURE 545B

CTTTTTCAAGTTTGGGGAACTTCAAAAGACCATAATCAACCAGGAGCTTATTATAGGAAAGGCTGAACAGAAGGG CTAGTGTATTGATTACACTTAACAGATCATATTTATCCAGACTCAGTATAGCTTAAAATTTTGTATTTCTTTATC TTGCTATGTTGCCCAGGCTAGAGTGCAGTGGCTATTCACAGGTGCAGTTATAGCACACTACAGCCTCCAACTCTT GGGTTCAAGCAACCCTGCCTCAGCTAACCAAGTAGCTGGGACTACAGGTGCATGCTACCATGCCCAGTCCATTTT TTAATCTTGAAATTTCTTCATTTTTCTTCTTCGGTTTCTTAAAATCTTTGCCTGAATCAGAACGCTGGCTTTTA GAAAAAATGAACTCTTTCAATTGAGATTAAGTCCATATTTTTCAAACATCACGTTCTCTATTGGCTTTTTGGTTT AGTGTTTCTAAATTTTCTCCTTCTGATTTTGCCTGTCTTATATAATGAGCATAGGAAAATTTTTGGAATGAGGCAG AAAAGTATATCAAGACATACTTCCTGGTTTTGGATGTAAGTTTTAAAGAATGGTATTTTTAATATTTGTACACAT TCTTTGAGCACCCAGGTACCCAAGCCAATAAGGAAAGTTAATTCCTTGCATATGACTGTTATATCTTTAGTGGTT GTCTCCCTCCCCCCACAGTCTCCTTGGCATTCCATGACAAGTTTGTCAACCTACACTTTATATAGACATGTC ATTATTTCATGGTCAAGCCTGTAGTATTAAAATGATTTTTTTAAAAGATGTAAACTGTGCTTAGTTAATTGGTTA CAGTGGCGTGATCTTGGCTCACTGCAACCCCCGCCCCCCGGGTTCAAGTGATTCTCCTGCCTCAGCCTCCCGAGT AGCTGGAATTACAGGCATGCGCCAGCACGCCCGGCTAAGTTTTGTATTTTTTGGCAGAGATGGGGTTTCACCATAT TGGCCAGGCTGGTCTCAAACTCCTGACCTTGTGATCCGCCCACCTCAGCCTCCGAAAGTGCTGGGATTACAGGCG TGAGCCACCACGTCCAACTGCCTTATTTTGTTCTGAATAAATTTACAGTATTGGGCAGCAATTCTGGATTCTAGA CTTGAGACCACAGAATCAACCATTTCATGAGGTTGTACTGTAATTATACACTGGAATATTCAGGTAGTCATCTTT GATTTTCATTCAAGTAAATATAGCCATAAGAAAATATCTGCTATACAGGAAAACCAGTATTAAGCAAATACCAC CATCCTTAACAGAAACAAAAATATATATATATTATTTTTAAAAATTAGCATTGTCATACAGTACAATTCTTAG TGAAGTGTATTGTGGAACAATTTAGAAACTTCCTTTTTTTCCCCTAGATTAAGGATACTTTCCTTGACTTGAGAC CATTAAGAATATTCACAACATTGAACCCAGGAGGCGGAGCTTGCAGTGAGCCGAGATTGCGCCACTGCGCTCCAG CCTGGGCAACAGAGCGAGACTCCATCTC

599/2682 FIGURE 546

MSHTASSCQELVENCAVHVAGMAQEDSRRGQVPSSFYHGANQELDLSTKVYKRESGSPYSVLVDTKMSKPHLHET EEQPYFRETRAVSDVHAVKEDRENSDDTEEEEEEVSYKREQIIVEVNLNNQTLNVSKGEKGVSSQSKETPVLKTS SEEEEEESEEEATDDSNDYGENEKQKKKEKIVEKVSVTQRRTRRAASVAAATTSPTPRTTRGRRKSVEPPKRKKR ATKEPKAPVQKAKCEEKETLTCEKCPRVFNTRWYLEKHMNVTHRRMQICDKCGKKFVLESELSLHQQTDCEKNIQ CVSCNKSFKKLWSLHEHIKIVHGYAEKKFSCEICEKKFYTMAHVRKHMVAHTKDMPFTCETCGKSFKRSMSLKVH SLQHSGEKPFRCENCDERFQYKYQLRSHMSIHIGHKQFMCQWCGKDFNMKQYFDEHMKTHTGEKPFICEICGKSFTSRPNMKRHRRTHTGEKPYPCDVCGQRFRFSNMLKAHKEKCFRVTSPVNVPPAVQIPLTTSPATPVPSVVNTATT PTPPINMNPVSTLPPRPIPHPFSHLHIHPHPHHPHHPHPPPPPALFKSEPLNHRGQSEDNFLRHLAEKN SSAOHH

600/2682 FIGURE 547

CAAGAGATGATATTTATACATTGCAGATCAATCCTGATTCTGCAGTTAATCCGGAACATTTATCCTATTTCCACT TTGTTGGACGAATAATGGGAATGGCTGTGTTTCATGGACATTATATTGATGGTGGTTTCACATTGCCTTTTTATA AGCAATTGCTTGGGAAGTCAATTACCTTGGATGACATGGAGTTAGTAGATCCGGATCTTCACAACAGTTTAGTGT GGATACTTGAGAATGATATTACAGGTGTTTTGGACCATACCTTCTGTGTTGAACATAATGCATATGGTGAAATTA TTCAGCATGAACTTAAACCAAATGGCAAAAGTATCCCTGTTAATGAAGAAAATAAAAAAGAATATGTCAGGCTCT ATGTGAACTGGAGATTTTTACGAGGCATTGAGGCTCAATTCTTGGCTCTGCAGAAAGGATTTAATGAAGTAATTC ATGACTGGAAGGTAAACACCCGGTTAAAACACTGTACACCAGACAGCAACATTGTCAAATGGTTCTGGAAAGCTG TGGAGTTTTTTGATGAAGAGCGACGAGCAAGATTGCTTCAGTTTGTGACAGGATCCTCTCGAGTGCCTCTGCAGG GCTTCAAAGCATTGCAAGGTGCTGCAGGCCCGAGACTCTTTACCATACACCAGATTGATGCCTGCACTAACAACC TGCCGAAAGCCCACACTTGCTTCAATCGAATAGACATTCCACCCTATGAAAAGCTATGAAAAGCTATATGAAAAGC TGCTAACAGCCATTGAAGAAACATGTGGATTTGCTGTGGAATGACAAGCTTCAAGGATTTACCCAGGACTCTATT TATACAACCCTGACTGACAGCCTCCTTTCAGCAGAGTTTCAAAGAATATGCTGAAATACAGGAAAACACTCCCCC $\tt CCCCCCCTTTTTTTTTTTTTTTTTTACATTTTAGGACACTGTGAGGGGAAAGGACAATTTTGAAATTCCTTTTC$ AAGGAAAAAAAAGGTCTTTATGCTTTGCCATGAGGCCACATTCAGCTGCTATTTAAACTTAATATCTTGAACCTA AAGAATGCTGACTTTTCCTACATTTCCAGAGTTAGGCAGTATTCTACACTTAAAGACTACTACTATTTTTATAAA AGGTAATCTATTCAAATTTCTTCACAGATTTCAAGTCTCTCAAACATCAAGACAACTTCAGCAGTCGGTACAAGT

601/2682 FIGURE 548

CCCCTGTCTGGGGCTGCCTTCGAAACCCCCACTCGGAAGGCAATGGGGCCTCAGGGCTACCCCACTACCCGCCCA CCCCGTTCTCCTTCCACCAGAAACCAGACTTCCTGGCGACAGCGACGGCAGCGTACCCTGACTTCTCAGCCTCCT GCCTGGCAGCCACCCCACACACCCCCCCAGGAGCAGCACATCTTCACTGAGCAGCACCCCGCTTTCCCACAGT CCCCAACTGGCACTTCCCTGTCTCAGACGCCCGGCGCAGGCCCAACTCAGGCCCGGCAGGGGGTTCCAAGGAAA TGGGGACCAGCAGCCTGGCCTGGTGGACACCACAGGAGGCCCAGGCGATGACTACGGGGTGCTTGGGAGCACTG CCAATGAGACAGAAGAAATCATCCAGGCGGAGAAAGGAGTTCAGGTCAAAGTGTGGTTCCAGAACCGAAGG $\mathtt{ATGAAGTGGAAGCGTGTGAAGGGAGGTCAGCCCATCTCCCCCAATGGGCAGGACCC}$ GCCTCTCCAAGTTCAGAGTGAGATTCTGCATGGAGGAAAAATGACTAAGGACTGAGCCCCCTACCCAACTACCCC ATGAAACTGCCCAGCATTCCTGGGAGTCTTAGGATTTTCTAGGAAGTTCTGTCCAGCCTCTTAGCAGCCTCTTCC CAGAGATACTGCTTCTCAGCGTCTCTTGGCTGCCACCCATGCCTCCTCCTACCGCTGTTCTCCTAGGTCAGCCAG GCCTCCTCGTGGTCTGGACACCACCTGGCCTGGTGGGAGAGGAGCTTTGGAACCAGCTGGCGACTCGGAAAGTAA ATGCTTCAAAAGGAAGGAAATGACAGAGACACACCCCTTGCCCACCTTCCTCTGTAGGCTGCACATCTGAGGCT TTGGGGCCCCTTAGTTGTCCCGAAACCCCAAGAAAAATCAGAATGAGGAGAGTCAAGGACAGCAACTCAGCTGCT GCAAGCCAGAAACACTCCCTGTCTCCAAATTTGTTGGCTAAGTGGAGACACTTCTGAGAACTGACTAGAGAAGA CAGAAAAATAGCCCGATGTAGGTTTCGGTGTCCCCATATAGGCCCGTCCACACAGGCTTGACTGGGTGGACAAGA ATGAACCCATGACAGCACCTGCTTCAAAATCAAAATCAATTTAGGGATACAGCAGGGGCTGTTGGGCTGTGC TCCAGAGAAAAGGAGCAGCTACTCCTTTTAAATCCACGATTTCTGGATTGAAAACCTGTCCAGATGCTGAGTTGT TGGGCTGAACAACTAGGAGCTGAAAACAACGTAGAGGCTGGAAAGTGTCCCCTGCATTCTGGAGGGGAGGGGAGA TAATAAGGAGGGCTGCTGGGTGAGGGCCTGGAGATGTGGAACCCTGGAGTGGAAGGTTCTCCAGTGACAGTGTCC TGACATTTGAGGACTGATGGCCAAAGAGCATGGGGGGACTGAAGCCCTGGCTGCCTCAGCGCTCTGTCTCCCAACA CCAGCTGGTGTTGCAGAGGGAGGTCAACGTGAGTTTGGATCTCTTGTACGCAGATGTAATCATTCACATGTAAAA ATAACCCCACCTCCCCACCCCAAAAAGGGCAAGAGCTGTGGAAAATGATTGCCAAATGAGATGGCTGGTTAGAGC ATGATTTTTCTAAAGCATACTTCATATATTTTCTTAAGATTACATCAAGCTAATTGTGCGAGCTCAATTCACTT

602/2682 FIGURE 549

 ${\tt MDPAASSCMRSLQPPAPVWGCLRNPHSEGNGASGLPHYPPTPFSFHQKPDFLATATAAYPDFSASCLAATPHSLPQEEHIFTEQHPAFPQSPNWHFPVSDARRRPNSGPAGGSKEMGTSSLGLVDTTGGPGDDYGVLGSTANETEKKSSRRRKESSGQSVVPEPKDEVEACEGRSAHLPQWAGP$

603/2682 FIGURE 550

GGCACGAGGAGCGTTTCGTTTGGACTTCTCGACTTGAGTGCCCGCCTCCTTCGCCGCCGCCTCTGCAGTCCTCAG CGCAGTTATGCCCAGTTCTTCCCGCTGTGGGGACACGACCACGGAGGAATCCTTGCTTCAGGGACTCGGGACCCT GCTGGACCCCTTCCTCGGGTTTAGGGGATGTGGGGACCAGGAGAAAGTCAGGATCCCTAAGAGTCTTCCCTGCCT GGATGGATGAGTGGCTTCTTCTCCACCTAGATTCTTTCCACAGGAGCCAGCATACTTCCTGAAC<u>ATG</u>GAGAGTGT TGTTCGCCGCTGCCCATTCTTATCCCGAGTCCCCCAGGCCTTTCTGCAGAAAGCAGGCAAATCTCTGTTGTTCTA CTACCAACAGATCAAAGAAACCCCTCCGGCCAGTGAGAAAGACAAAACTGCTAAGGCCAAGGTCCAACAGACTCC TGCAAGCAAATGCCCTTTCCTGGCAGCACAGATGAATCAGAGAGGCAGCAGTGTCTTCTGCAAAGCCAGTCTTGA GCTTCAGGAGGATGTGCAGGAAATGAATGCCGTGAGGAAAGAGGTTGCTGAAACCTCAGCAGGCCCCAGTGTGGT TAGTGTGAAAACCGATGGAGGGGATCCCAGTGGACTGCTGAAGAACTTCCAGGACATTATGCAAAAGCAAAGACC AGAAAGAGTGTCTCATCTTCTTCAAGATAACTTGCCAAAATCTGTTTCCACTTTTCAGTATGATCGTTTCTTTGA GAAAAAATTGATGAGAAAAAGAATGACCACACCTATCGAGTTTTTAAAACTGTGAACCGGCGAGCACACATCTT CCCCATGGCAGATGACTATTCAGACTCCCTCATCACCAAAAAGCAAGTGTCAGTCTGGTGCAGTAATGACTACCT AGGAATGAGTCGCCACCCACGGGTGTGTGGGGCAGTTATGGACACTTTGAAACAACATGGTGCTGGGGCAGGTGG TACTAGAAATATTTCTGGAACTAGTAAATTCCATGTGGACTTAGAGCGGGAGCTGGCAGACCTCCATGGGAAAGA TGCCGCACTCTTGTTTTCCTCGTGCTTTGTGGCCAATGACTCAACCCTCTTCACCCTGGCTAAGATGATGCCAGG CTGTGAGATTTACTCTGATTCTGGGAACCATGCCTCCATGATCCAAGGGATTCGAAACAGCCGAGTGCCAAAGTA CATCTTCCGCCACAATGATGTCAGCCACCTCAGAGAACTGCTGCAAAGATCTGACCCCTCAGTCCCCAAGATTGT GGCATTTGAAACTGTCCATTCAATGGATGGGGCGGTGTGCCCACTGGAAGAGCTGTGTGATGTGGCCCATGAGTT TGGAGCAATCACCTTCGTGGATGAGGTCCACGCAGTGGGGCTTTATGGGGCTCGAGGCGGAGGGATTGGGGATCG GGATGGAGTCATGCCAAAAATGGACATCATTTCTGGAACACTTGGCAAAGCCTTTGGTTGTGTTGGAGGGTACAT $\tt CGCCAGCACGAGTTCTCTGATTGACACCGTACGGTCCTATGCTGCTTCATCTTCACCACCTCTCTGCCACC$ CATGCTGCTGGGGCCCTGGAGTCTGTGCGGATCCTGAAGAGCGCTGAGGGACGGTGCTTCGCCGCCAGCA CCAGCGCAACGTCAAACTCATGAGACAGATGCTAATGGATGCCGGCCTCCCTGTTGTCCACTGCCCCAGCCACAT CATCCCTGTGCGGGTTGCAGATGCTGCTAAAAACACAGAAGTCTGTGATGAACTAATGAGCAGACATAACATCTA CGTGCAAGCAATCAATTACCCTACGGTGCCCCGGGGAGAAGAGCTCCTACGGATTGCCCCCACCCCTCACCACAC ACCCAGATGATGAACTACTTCCTTGAGAATCTGCTAGTCACATGGAAGCAAGTGGGGCTGGAACTGAAGCCTCA TTCCTCAGCTGAGTGCAACTTCTGCAGGAGGCCACTGCATTTTGAAGTGATGAGTGAAAGAGAGAAGTCCTATTT CTCAGGCTTGAGCAAGTTGGTATCTGCTCAGGCCTGAGCATGACCTCAATTATTTCACTTAACCCCAGGCCATTA

604/2682 FIGURE 551

MESVVRRCPFLSRVPQAFLQKAGKSLLFYAQNCPKMMEVGAKPAPRALSTAAVHYQQIKETPPASEKDKTAKAKV QQTPDGSQQSPDGTQLPSGHPLPATSQGTASKCPFLAAQMNQRGSSVFCKASLELQEDVQEMNAVRKEVAETSAG PSVVSVKTDGGDPSGLLKNFQDIMQKQRPERVSHLLQDNLPKSVSTFQYDRFFEKKIDEKKNDHTYRVFKTVNRR AHIFPMADDYSDSLITKKQVSVWCSNDYLGMSRHPRVCGAVMDTLKQHGAGAGGTRNISGTSKFHVDLERELADL HGKDAALLFSSCFVANDSTLFTLAKMMPGCEIYSDSGNHASMIQGIRNSRVPKYIFRHNDVSHLRELLQRSDPSV PKIVAFETVHSMDGAVCPLEELCDVAHEFGAITFVDEVHAVGLYGARGGGIGDRDGVMPKMDIISGTLGKAFGCV GGYIASTSSLIDTVRSYAAGFIFTTSLPPMLLAGALESVRILKSAEGRVLRRQHQRNVKLMRQMLMDAGLPVVHC PSHIIPVRVADAAKNTEVCDELMSRHNIYVQAINYPTVPRGEELLRIAPTPHHTPQMMNYFLENLLVTWKQVGLE LKPHSSAECNFCRRPLHFEVMSEREKSYFSGLSKLVSAQA

605/2682 FIGURE **552**

606/2682 FIGURE 553

 ${\tt MTDCEFGYIYRLAQDYLQCVLQIPQPGSGPSKTSRVLQNVAFSVQKEVEKNLKSCLDNVNVVSVDTARTLFNQVMEKEFEDGIINWGRIVTIFAFEGILIKKLLRQQIAPDVDTYKEISYFVAEFIMNNTGEWIRQNGGWENGFVKKFEPKSGWMTFLEVTGKICEMLSLLKQYC$

607/2682 FIGURE 554

608/2682 FIGURE 555

 ${\tt MPKVKRSRKAPQDGWELIEPTLDQLDQKMREAETEPHEGKRKVESLWPIFRIHHQKTRYIFDLFYKRKAYSRELL}\\ {\tt DICYKEGLADKNLLAKWKKQGIGNLCCLRCIQTRDTNFGTNCICRVPKSKLEVGRIIECTHCGCRGCSG}$

609/2682 FIGURE 556

CCGCC<u>ATG</u>GGGTCCCTGTTCCGGAGCGAGACCATGTGCCTGGCGCAGCTCTTCCTGCAGTCGGGCACGGCCTACG AGTGCCTCAGCGCCCTGGGCGAGAAAGGCCTGGTCCAGTTCCGAGACCTCAACCAGAACGTAAGTTCTTTCCAAA GAAAATTTGTTGGTGAGGTGAAGAGGTGTGAAGAGCTAGAGCGAATATTGGTGTATTTGGTACAGGAAATTAATA GAGCTGATATTCCCCTTCCTGAAGGAGGGCCAGCCCTCCTGCGCCACCCCTGAAACAGGTTCTAGAAATGCAGG AGCAGTTGCAGAAGCTCGAGGTTGAACTGAGAGAAGTCACTAAGAACAAGGAGAAAACTGAGGAAAAACTTGCTGG AACTGATAGAGTACACTCACATGCTGAGAGTGACAAAGACCTTTGTGAAACGCAACGTTGAGTTTGAACCCACTT ATGAAGAATTCCCTTCCTTAGAGAGCGATTCTTTGTTGGATTACAGCTGTATGCAGAGGCTGGGAGCAAAACTGG GATTTGTGTCTGGCCTAATTAACCAAGGAAAAGTGGAAGCATTTGAAAAAATGTTGTGGAGAGTCTGCAAAGGGT ACACCATCGTGTCCTATGCAGAACTGGATGAATCCCTTGAAGACCCTGAAACAGGGGAAGTCATAAAATGGTATG TCTTTTTAATATCCTTTTGGGGAGAGCAGATTGGCCACAAGGTTAAGAAGATATGTGATTGCTACCACTGCCACG TGTACCCCTATCCAAACACAGCCGAGGAGCGGAGGGAGATCCAGGAGGGGGCTGAACACCCGCATCCAGGATCTCT TGATCCAGGTGAAGAAAATGAAGGCCATCTATCACATGCTGAACATGTGCAGCTTTGACGTGACCAACAAGTGCC GTGGTGCTACAATCCCCTCATTCATGAATATAATCCCCACAAAAGAAACACCCCCCACTCGGATCCGCACCAACA AATTCACCGAGGGATTTCAGAACATCGTGGATGCTTATGGAGTCGGAAGCTACAGAGAAGTCAATCCAGCTCTCT TTACCATCATCACCTTCCCGTTTTTATTTGCTGTGATGTTTTGGAGACTTCGGACATGGCTTTGTGATGTTTTTAT TTGCCCTCTTGTGGGTGTTAAATGAAAATCATCCCAGACTAAATCAGTCACAAGAGATCATGAGGATGTTTTTTA ATGGCCGGTACATCCTCCTGCTGATGGGGCTGTTCTCAGTGTACACTGGCCTCATCTACAACGACTGCTTTTCAA AGTCAGTCAACCTGTTCGGCTCTGGGTGGAACGTGTCGGCCATGTACAGCTCCAGCCCACCCCACAGAGCATA AGAAGATGGTGCTTTGGAACGACAGCGTCGTTAGACACAACAGCATTTTGCAGCTGGATCCAAGCATTCCTGGAG TGTTCCGAGGCCCTTATCCCCTTGGCATTGATCCTATTTGGAACTTGGCCACAAATCGCCTCACTTTTCTAAACT ACTTGCACTTCAGGAAGAAGTTCAACATTTACCTGGTTTCCATCCCGGAACTTCTCTTCATGCTCTGTATCTTTG GATACCTTATATTTATGATTTTCTACAAGTGGCTGGTTTTTTCAGCAGAAACCTCCAGAGTTGCTCCCAGCATTC TGATTGAATTTATTAACATGTTTTTATTCCCAGCCAGTAAAACAAGTGGCCTTTACACAGGGCAGGAGTATGTCC AGAGAGTGCTGCTGGTTGTCACAGCATTGTCTGTCCCTGTCCTCTTCTTGGGAAAGCCACTGTTTTTGTTGTGGC TTCACAATGGGCGTAGTTGCTTCGGGGTGAACCGGAGTGGCTACACACTTATAAGGAAAGATAGTGAGGAAGAAG AAGAGTTTAATTTTGGAGAAATATTAATGACCCAAGTAATCCATTCCATCGAGTACTGTCTGGGATGCATCTCCA ACACCGCCTCCTACCTGAGGCTCTGGGCGCTTAGCCTGGCTCACGCACAGTTGTCTGATGTCCTGTGGGCCATGC TGATGCGCGTGGGCCTCCGCGTTGACACCACCTATGGCGTCTTGCTACTGCTCCCGGTTATCGCGCTCTTTGCAG TTTTGACCATTTTCATCCTTCTGATCATGGAAGGGCTTTCTGCGTTTCTTCACGCCATACGCCTCCACTGGGTAG AATTTCAGAACAAATTCTACGTTGGTGCAGGCACCAAATTTGTTCCTTTCTCATTCAGTCTACTTTCATCAAAGT TCAATAACGACGACAGTGTGGCA**TGA**TCATATTGCTGTAACCAACAAGCTTTCAGATTTATGGAGAATGACCATG TTATAGACTTTCACTTATGTCAGATTTATGATAGGAAAAATTCCATCTTCATTACTGCCTTATGACATAGCCAAA TAATTCTGTAAGATATAC

610/2682 FIGURE 557

MGSLFRSETMCLAQLFLQSGTAYECLSALGEKGLVQFRDLNQNVSSFQRKFVGEVKRCEELERILVYLVQEINRA
DIPLPEGEASPPAPPLKQVLEMQEQLQKLEVELREVTKNKEKLRKNLLELIEYTHMLRVTKTFVKRNVEFEPTYE
EFPSLESDSLLDYSCMQRLGAKLGFVSGLINQGKVEAFEKMLWRVCKGYTIVSYAELDESLEDPETGEVIKWYVF
LISFWGEQIGHKVKKICDCYHCHVYPYPNTAEERREIQEGLNTRIQDLYTVLHKTEDYLRQVLCKAAESVYSRVI
QVKKMKAIYHMLNMCSFDVTNKCLIAEVWCPEADLQDLRRALEEGSRESGATIPSFMNIIPTKETPPTRIRTNKF
TEGFQNIVDAYGVGSYREVNPALFTIITFPFLFAVMFGDFGHGFVMFLFALLWVLNENHPRLNQSQEIMRMFFNG
RYILLLMGLFSVYTGLIYNDCFSKSVNLFGSGWNVSAMYSSSHPPAEHKKMVLWNDSVVRHNSILQLDPSIPGVF
RGPYPLGIDPIWNLATNRLTFLNSFKMKMSVILGIIHMTFGVILGIFNHLHFRKKFNIYLVSIPELLFMLCIFGY
LIFMIFYKWLVFSAETSRVAPSILIEFINMFLFPASKTSGLYTGQEYVQRVLLVVTALSVPVLFLGKPLFLLWLH
NGRSCFGVNRSGYTLIRKDSEEEVSLLGSQDIEEGNHQVEDGCREMACEEFNFGEILMTQVIHSIEYCLGCISNT
ASYLRLWALSLAHAQLSDVLWAMLMRVGLRVDTTYGVLLLLPVIALFAVLTIFILLIMEGLSAFLHAIRLHWVEF

611/2682 FIGURE 558

CTCTCTCTCTATCTCTCAGA**ATG**ACAATTCTAGGTACAACTTTTGGCATGGTTTTTTCTTTACTTCAAGTCGT TTCTGGAGAAAGTGGCTATGCTCAAAATGGAGACTTGGAAGATGCAGAACTGGATGACTACTCATTCTCATGCTA TAGCCAGTTGGAAGTGAATGGATCGCAGCATTCACTGACCTGTGCTTTTGAGGACCCAGATGTCAACACCACCAA TCTGGAATTTGAAATATGTGGGGCCCTCGTGGAGGTAAAGTGCCTGAATTTCAGGAAACTACAAGAGATATATTT CATCGAGACAAGAAATTCTTACTGATTGGAAAGAGCAATATATGTGTGAAGGTTGGAGAAAAGAGTCTAACCTG CAAAAAATAGACCTAACCACTATAGTTAAACCTGAGGCTCCTTTTGACCTGAGTGTCATCTATCGGGAAGGAGC CAATGACTTTGTGGTGACATTTAATACATCACACTTGCAAAAGAAGTATGTAAAAGTTTTAATGCATGATGTAGC TTACCGCCAGGAAAAGGATGAAAACAAATGGACGCATGTGAATTTATCCAGCACAAAGCTGACACTCCTGCAGAG TGAATGGAGTCCAAGTTATTACTTCAGAACTCCAGAGATCAATAATAGCTCAGGGGAGATGGATCCTATCTTACT AACCATCAGCATTTTGAGTTTTTTCTCTGTCGCTCTGTTGGTCATCTTGGCCTGTGTTATGGAAAAAAAGGAT TAAGCCTATCGTATGGCCCAGTCTCCCCGATCATAAGAAGACTCTGGAACATCTTTGTAAGAAAACCAAGAAAAAA TTTAAATGTGAGTTTCAATCCTGAAAGTTTCCTGGACTGCCAGATTCATAGGGTGGATGACATTCAAGCTAGAGA TGAAGTGGAAGGTTTTCTGCAAGATACGTTTCCTCAGCAACTAGAAGAATCTGAGAAGCAGAGGCTTGGAGGGGA TGTGCAGAGCCCCAACTGCCCATCTGAGGATGTAGTCGTCACTCCAGAAAGCTTTGGAAGAGATTCATCCCTCAC ATGCCTGGCTGGGAATGTCAGTGCATGTGACGCCCCTATTCTCCTCTTCCAGGTCCCTAGACTGCAGGGAGAG TGGCAAGAATGGGCCTCATGTGTACCAGGACCTCCTGCTTAGCCTTGGGACTACAAACAGCACGCTGCCCCCTCC ATTTTCTCTCCAATCTGGAATCCTGACATTGAACCCAGTTGCTCAGGGTCAGCCCATTCTTACTTCCCTGGGATC AAATCAAGAAGAAGCATATGTCACCATGTCCAGCTTCTACCAAAACCAG<u>TGA</u>AGTGTAAGAAACCCAGACTGAAC TTACCGTGAGCGACAAAGATGATTTAAAAGGGAAGTCTAGAGTTCCTAGTCTCCCTCACAGCACAGAGAAGACAA **AATTAGCAAAACCCCACTACACAGTCTGCAAGATTCTGAAACATTGCTTTGACCACTCTTCCTGAGTTCAGTGGC** ACTCAACATGAGTCAAGAGCATCCTGCTTCTACCATGTGGATTTGGTCACAAGGTTTAAGGTGACCCAATGATTC **AGCTATTT**

612/2682 FIGURE 559

MTILGTTFGMVFSLLQVVSGESGYAQNGDLEDAELDDYSFSCYSQLEVNGSQHSLTCAFEDPDVNTTNLEFEICG ALVEVKCLNFRKLQEIYFIETKKFLLIGKSNICVKVGEKSLTCKKIDLTTIVKPEAPFDLSVIYREGANDFVVTF NTSHLQKKYVKVLMHDVAYRQEKDENKWTHVNLSSTKLTLLQRKLQPAAMYEIKVRSIPDHYFKGFWSEWSPSYY FRTPEINNSSGEMDPILLTISILSFFSVALLVILACVLWKKRIKPIVWPSLPDHKKTLEHLCKKPRKNLNVSFNP ESFLDCQIHRVDDIQARDEVEGFLQDTFPQQLEESEKQRLGGDVQSPNCPSEDVVVTPESFGRDSSLTCLAGNVS ACDAPILSSSRSLDCRESGKNGPHVYQDLLLSLGTTNSTLPPPFSLQSGILTLNPVAQGQPILTSLGSNQEEAYV TMSSFYQNQ

613/2682 FIGURE 560

ACTCGTCTCTGGTAAAGTCTGAGCAGGACAGGGTGGCTGACTGGCAGATCCAGAGGTTCCCTTGGCAGTCCACGC CAGGCCTTCACCATGGATCAGTTCCCTGAATCAGTGACAGAAAACTTTGAGTACGATGATTTGGCTGAGGCCTGT TATATTGGGGACATCGTGGTCTTTGGGACTGTGTTCCTGTCCATATTCTACTCCGTCATCTTTGCCATTGGCCTG GTGGGAAATTTGTTGGTAGTGTTTGCCCTCACCAACAGCAAGAAGCCCAAGAGTGTCACCGACATTTACCTCCTG AACCTGGCCTTGTCTGATCTGCTGTTTGTAGCCACTTTGCCCTTCTGGACTCACTATTTGATAAATGAAAAGGGC CTCCACAATGCCATGTGCAAATTCACTACCGCCTTCTTCATCGGCTTTTTTTGGAAGCATATTCTTCATCACC GTCATCAGCATTGATAGGTACCTGGCCATCGTCCTGGCCGCCAACTCCATGAACAACCGGACCGTGCAGCATGGC GTCACCATCAGCCTAGGCGTCTGGGCAGCAGCCATTTTGGTGGCAGCACCCCAGTTCATGTTCACAAAGCAGAAA GAAAATGAATGCCTTGGTGACTACCCCGAGGTCCTCCAGGAAATCTGGCCCGTGCTCCGCAATGTGGAAACAAAT TTTCTTGGCTTCCTACTCCCCTGCTCATTATGAGTTATTGCTACTTCAGAATCATCCAGACGCTGTTTTCCTGC AAGAACCACAAGAAGCCAAAGCCATTAAACTGATCCTTCTGGTGGTCATCGTGTTTTTCCTCTTCTGGACACCC AGGCTGGCCCTCAGTGTGACTGAGACGGTTGCATTTAGCCATTGTTGCCTGAATCCTCTCATCTATGCATTTGCT GGGGAGAAGTTCAGAAGATACCTTTACCACCTGTATGGGAAATGCCTGGCTGTCCTGTGTGGGCGCTCAGTCCAC AGTGATGGAGATGCATTGCTCCTTCTC TGAAGGGGAATCCCAAAGCCTTGTGTCTACAGAGAACCTGGAGTTCCTGAACCTGATGCTGACTAGTGAGGAAAGATTTTTGTTGTTATTTCTTACAGGCACAAAATGATGGACCCAATGCACA CAAAACAACCCTAGAGTGTTGTTGAGAATTGTGCTCAAAATTTGAAGAATGAACAAATTGAACTCTTTGAATGAC AAAGAGTAGACATTTCTCTTACTGCAAATGTCATCAGAACTTTTTGGTTTGCAGATGACAAAAATTCAACTCAGA CTAGTTTAGTTAAATGAGGGTGGTGAATATTGTTCATATTGTGGCACAAGCAAAAGGGTGTCTGAGCCCTCAAAG CCCCAGACTTTACATGACACAGCTTTATCACCAGAGAGGGACTGACACCCATGTTTCTCTGGCCCCAAGGGAAAA TTCCCAGGGAAGTGCTCTGATAGGCCAAGTTTGTATCAGGTGCCCATCCCTGGAAGGTGCTGTTATCCATGGGGA AGGGATATATAAGATGGAAGCTTCCAGTCCAATCTCATGGAGAAGCAGAAATACATATTTCCAAGAAGTTGGATG GGTGGGTACTATTCTGATTACACAAAACAAATGCCACACATCACCCTTACCATGTGCCTGATCCAGCCTCTCCCC TGATTACACCAGCCTCGTCTTCATTAAGCCCTCTTCCATCATGTCCCCAAACCTGCAAGGGCTCCCCACTGCCTA CTGCATCGAGTCAAAACTCAAATGCTTGGCTTCTCATACGTCCACCATGGGGTCCTACCAATAGATTCCCCATTG CCTCCTCCTTCCCAAAGGACTCCACCCATCCTATCAGCCTGTCTCTTCCATATGACCTCATGCATCTCCACCTGC GCTTGGGACAAATCAAGCTTCAGTTTCCTGGTCTGTAGAAGAGGGATAAGGTACCTTTCACATAGAGATCATCCT TTCCAGCATGAGGAACTAGCCACCAACTCTTGCAGGTCTCAACCCTTTTGTCTGCCTCTTAGACTTCTGCTTTCC ACACCTGCACTGCTGTGCTGTGCCCAAGTTGTGGTGCTGACAAAGCTTGGAAGAGCCTGCAGGTGCCTTGGCCGC GTGCATAGCCCAGACACAGAAGAGGCTGGTTCTTACGATGGCACCCAGTGAGCACTCCCAAGTCTACAGAGTGAT AGCCTTCCGTAACCCAACTCTCCTGGACTGCCTTGAATATCCCCTCCCAGTCACCTTGTGCAAGCCCCTGCCCAT CCTAGAAACGTTTGGAACAATGTAAAACTTTAAAGCTCGAAAACAATTGTAATAATGCTAAAGAAAAAGTCATCC AATCTAACCACATCAATATTGTCATTCCTGTATTCACCCGTCCAGACCTTGTTCACACTCTCACATGTTTAGAGT TGCAATCGTAATGTACAGATGGTTTTATAATCTGATTTGTTTTCCTCTTAACGTTAGACCACAAATAGTGCTCGC TTTCTATGTAGTTTGGTAATTATCATTTTAGAAGACTCTACCAGACTGTGTATTCATTGAAGTCAGATGTGGTAA TTCCTTCAAGATCATGTACCCCAATTTACTTGCCATTACTCAATTGATAAACATTTAACTTGTTTCCAATGTTTA GCAAATACATATTTTATAGAACTTC

614/2682 FIGURE 561

MDQFPESVTENFEYDDLAEACYIGDIVVFGTVFLSIFYSVIFAIGLVGNLLVVFALTNSKKPKSVTDIYLLNLAL SDLLFVATLPFWTHYLINEKGLHNAMCKFTTAFFFIGFFGSIFFITVISIDRYLAIVLAANSMNNRTVQHGVTIS LGVWAAAILVAAPQFMFTKQKENECLGDYPEVLQEIWPVLRNVETNFLGFLLPLLIMSYCYFRIIQTLFSCKNHK KAKAIKLILLVVIVFFLFWTPYNVMIFLETLKLYDFFPSCDMRKDLRLALSVTETVAFSHCCLNPLIYAFAGEKF RRYLYHLYGKCLAVLCGRSVHVDFSSSESQRSRHGSVLSSNFTYHTSDGDALLLL

615/2682 FIGURE 562

GGGGAACTTGAGGGAAGTAGGGAAGACTCCTCTTGGGACCTTTGGAGTAGGTGACACATGAGCCCAGCCCCAGCT ATTGCAGGGACCTCCAGTTGGGCCAGGACAGCTGCTGTAGCTTTAACCAGACAGCTCAGACCTGTCTGGAGG $\tt CTGCCAGTGACAGGTTAGGTTTAGGGCAGAGAAGAAGCCAAGACCCATGGTGGGGGAAGATGTGGCCTGTGTTGTGGA$ CACTCTGTGCAGTCAGGGTGACCGTCGATGCCATCTCTGTGGAAACTCCGCAGGACGTTCTTCGGGCTTCGCAGG GAAAGAGTGTCACCCTGCCCTGCACCTACCACACTTCCACCTCCAGTCGAGAGGGACTTATTCAATGGGATAAGC AGAATCGCGTCAGCATATCCAACAATGCTGAGCAGTCCGATGCCTCCATCACCATTGATCAGCTGACCATGGCTG ACAACGGCACCTACGAGTGTTCTGTCTCGCTGATGTCAGACCTGGAGGGCAACACCAAGTCACGTGTCCGCCTGT TGGTCCTCGTGCCACCCTCCAAACCAGAATGCGGCATCGAGGGAGAGCCATAATTGGGAACAACATCCAGCTGA CCTGCCAATCAAAGGAGGGCTCACCAACCCCTCAGTACAGCTGGAAGAGGTACAACATCCTGAATCAGGAGCAGC CCCTGGCCCAGCCAGCCTCAGGTCAGCCTGTCTCCCTGAAGAATATCTCCACAGACACCATCGGGTTACTACATCT CCCTGTATGTGGGCATCGCGGTGGGCGTGGTTGCAGCCCTCATTATCATTGGCATCATCATCTACTGCTGCTGCT GCCGAGGGAAGGACAACACTGAAGACAAGGAGGATGCAAGGCCGAACCGGGAAGCCTATGAGGAGCCACCAG $\tt GTGAATCCCCGGACCACCTCGACCAG{\color{blue}{\textbf{TGA}}} CAGGCCAGCAGCAGGGGGGGGGGGGAGGAAGGGTTAGGGGTTCATTC$ TCCCGCTTCCTGGCCTCCCTTCTCCTTTCTAAGCCCTGTTCTCCTGTCCCTCCATCCCAGACATTGATGGGGACA TTTCTTCCCCAGTGTCAGCTGTGGGGAACATGGCTGGCCTGGTAAGGGGGTCCCTGTGCTGATCCTGCTGACCTC CCTCCACTTCCCTCGTAGTTGGCAGGAGCTCCTGGAAGCACAGCGCTGAGCATGGGGCGCTCCCACTCAGAACTC TCCAGGGAGGCGATGCCAGCCTTGGGGGGTGGGGGCTGTCCTGCTCACCTGTGTGCCCAGCACCTGGAGGGGCAC TGGCCTGGCCTCCAGCTCCCATCCCTTTCCAACCTCACTTCCCGTAGCTGCCAGTATGTTCCAAACCCTCCTGG GAAGGCCACCTCCCACTCCTGCTGCACAGGCCCTGGGGAGCTTTTGCCCACACACTTTCCATCTCTGCCTGTCAA TATCGTACCTGTCCCTCCAGGCCCATCTCAAATCACAAGGATTTCTCTAACCCTATCCTAATTGTCCACATACGT GGAAACAATCCTGTTACTCTGTCCCACGTCCAATCATGGGCCACAAGGCACAGTCTTCTGAGCGAGTGCTCTCAC TGTATTAGAGCGCCAGCTCCTTGGGGCAGGGCCTGGGCCTCATGGCTTTTGCTTTCCCTGAAGCCCTAGTAGCTG GCGCCCATCCTAGTGGGCACTTAAGCTTAATTGGGGAAACTGCTTTGATTGGTTGTGCCTTCCCTTCTCTGGTCT GATTTAAAGTGAACACACAAGGGAGCTTGCTTGCAGATGGTCTGAGTTCTTGTGTCCTGGTAATTCCTCTCCA GGCCAGAATAATTGGCATGTCTCCTCAACCCACATGGGGTTCCTGGTTGTTCCTGCATCCCGATACCTCAGCCCT TGTCGAGCATTTCTTCTACTCTTGAGAGCTCAGGCAGCGTTAGGGCTGCTTAGGTCTCATGGACCAGTGGCTGGT CTCACCCAACTGCAGTTTACTATTGCTATCTTTTCTGGATGATCAGAAAAATAATTCCATAAATCTATTGTCTAC TTGCGATTTTTTAAAAATGTATATTTTTATATATATTGTTAAATCCTTTGCTTCATTCCAAATGCTTTCAGTAA TAATAAAATTGTGGGTGG

616/2682 FIGURE 563

MVGKMWPVLWTLCAVRVTVDAISVETPQDVLRASQGKSVTLPCTYHTSTSSREGLIQWDKLLLTHTERVVIWPFS
NKNYIHGELYKNRVSISNNAEQSDASITIDQLTMADNGTYECSVSLMSDLEGNTKSRVRLLVLVPPSKPECGIEG
ETIIGNNIQLTCQSKEGSPTPQYSWKRYNILNQEQPLAQPASGQPVSLKNISTDTSGYYICTSSNEEGTQFCNIT
VAVRSPSMNVALYVGIAVGVVAALIIIGIIIYCCCCRGKDDNTEDKEDARPNREAYEEPPEQLRELSREREEEDD
YRQEEQRSTGRESPDHLDQ

617/2682 FIGURE 564A

GAATTCCGGGCAGCATCATCAAGGCACATAGATTCTCTCTTTGAACAATGCAGCTGCTGCAGGGGATGGGGAAGG GATGGCACTGGCAATTCAAGACTGCCTTTCCTACTTCTTCAGTGCCTCTTTCACCAATATGAAGTTAAAACCAGG ATCCTTCAAACCAAAAATGTGGTGGAAGAAAGAAAACCGTGTCTTTCAGCAGC<u>ATG</u>CCATCGGAAAAGAAAATTA CTGACCAGATCTGTGAGGACTGTGCCTTTTCCATACTCCACGGGGAAAACTATGAGTCTCTGGACCTAGTTGCCA ATTCAGCAGATGTGGCAAACATCTGGGTGTCTGGGTTACGGTACCTGGTTTCTCGAAGTAAGCAGCCTCTTGATT TTATGGAGGGCAACCAGAACACCACGGTTCATGTGGTTGAAAACAGTGTTTGAAGCAGCAGATGTTGATGGGA GGTTAAAGTTTAAAGAAATCCAGAAGAGCAAGGAAAAACTAACCACCCGCGTGACCGAAGAGGAATTTTGTGAAG CTTTTTGTGAACTTTGCACCAGGCCAGAAGTGTATTTCTTACTTGTACAGATATCTAAAAACAAAGAATATTTGG ATGCCAATGATCTCATGCTCTTTTTAGAAGCTGAGCAAGGAGTCACCCATATCACCGAGGATATATGCTTAGACA TCATAAGGAGATACGAACTTTCTGAAGAGGGACGTCAAAAAGGGTTTCTTGCAATTGATGGCTTTACCCAGTATT TATTGTCATCAGAATGTGACATTTTTGATCCTGAGCAAAAGAAGGTTGCCCAAGATATGACCCAGCCATTATCTC ACTACTATATCAATGCCTCTCATAACACCTATCTAATAGAAGACCAGTTCAGGGGGCCAGCTGACATCAATGGGT ACATTAGAGCTTTGAAAATGGGCTGTCGAAGCGTTGAACTCGATGTAAGTGATGGTTCAGATAATGAACCAATCC TTGCTTCTGAATACCCACTCATTCTTTGCTTGGGAAATCACTGCTCCTTGCCGCAGCAGAAGGTAATGGCTCAAC AGATGAAAAAGGTCTTTGGCAATAAACTCTATACTGAAGCACCTTTGCCCTCAGAATCCTACCTCCCATCACCAG AAAAATTAAAAAGAATGATCATTGTGAAAGGAAAGAAGTTGCCTTCTGATCCAGATGTGTTAGAAGGAGAAGTAA CAGATGAAGATGAAGAAGCTCAAATGTCTCGAAGGATGTCGGTAGATTACAATGGTGAGCAGAAGCAAATCCGAC GCCAAAACTATTGGGAAATGTGTTCATTTAGTGAAACAGAGGCCAGCCGCATTGCAAATGAGTACCCAGAGGATT TTGTTAATTAATAAGAAGTTCTTATCAAGAATCTATCCAAGTGCCATGAGGATCGATTCCAGTAACTTGAATC CACAGGACTTTTGGAATTGTGGCTGTCAGATTGTAGCAATGAATTTTCAGACTCCGGGTCCAATGATGGACCTTC ACACGGGCTGGTTTCTTCAAAACGGGGGATGTGGTTATGTTCTAAGGCCGTCTATAATGCGAGATGAAGTTTCTT ACTTCAGCGCAAATACAAAGGGCATTCTACCTGGGGTGTCTCCTCTAGCTCTTCATATCAAGATCATCAGTGGTC AGAATTTCCCAAAGCCCAAGGGAGCTTGTGCCAAAGGGGATGTCATAGATCCCTATGTTTGTATAGAGATACACG GAATTCCAGCGGATTGTTCGGAACAAAGAACTAAAACTGTACAGCAAAACAGTGATAATCCTATTTTTGATGAAA CTTTTGAGTTCCAAGTAAACCTACCTGAGCTGGCCATGATCCGTTTTGTTGTTCTGGATGATGACTACATTGGGG ATGACTTTATAGGGCAATATACGATACCATTTGAATGTTTGCAGCCTGGATATCGGCATGTTCCCCTGCGTTCTT TTGTGGGTGACATCATGGAGCACGTAACCCTTTTTGTCCACATAGCAATAACTAATCGAAGTGGAGGAGGAAAGG CACAGAAGCGCAGTCTTTCAGTGAGAATGGGGAAGAAAGTTCGGGAATATACCATGCTCAGGAATATCGGTCTTA AAACCATTGATGACATCTTTAAAATAGCGGTTCATCCATTACGAGAAGCCATAGATATGAGAGAAAATATGCAGA CATCTCGGCTCATCACCAGTGACAATACTCCTTCAGTCTCACTTGTGATGAAAGACAGCTTTCCTTACCTGGAGC CTCTGGGTGCAATTCCAGATGTGCAGAAAAAGATGCTGACTGCTTATGATCTGATGATTCAAGAGAGCCGGTTTC TCATAGAAATGGCGGACACAGTCCAGGAAAAGATTGTACAGTGTCAGAAAGCAGGGATGGAGTTCCATGAAGAAC TTCATAATTTGGGGGCAAAAGAAGGCTTGAAGGGAAGAAAACTCAACAAAGCAACTGAGAGCTTTGCTTGGAACA TTACAGTATTGAAGGGCCAAGGAGATCTGTTGAAGAATGCCAAGAATGAAGCTATAGAAAACATGAAGCAGATCC AGCTGGCATGCCTGTCCTGTGGACTGAGTAAAGCCCCCAGCAGCAGTGCTGAGGCCAAGAGCAAGCCCAGCCTGG ${\tt AAGCCATAGAGGAGAAGGAAAGTAGTGAGGAGAATGGGAAGCTG} {\tt TGAC} {\tt CTCTGGGCATTATCGACACGTTCACCCA}$ TCTTATCAAGGACTCTGGTTTCTCATTCTTGTTTTCTTTAAATGTTTTATAAGTTCACAAAATGGTGCCCT ATATGGGGTATTGGACATAGATATTTCACAATGTCAGTATTTCAGTGTAGTTAATTTATCTAAATTAAAGCCTT GTGTTGCATTATTCATTTAGTGAGTTATTCCTTGATCATTTTGGGACAATTGTTTTAATCTGAAATTCTAAAGAG

618/2682 FIGURE 564B

619/2682 FIGURE 565

MPSEKKISSANDCISFMQAGCELKKVRPNSRIYNRFFTLDTDLQALRWEPSKKDLEKAKLDISAIKEIRLGKNTE
TFTNNGLADQICEDCAFSILHGENYESLDLVANSADVANIWVSGLRYLVSRSKQPLDFMEGNQNTPRFMWLKTVF
EAADVDGNGIMLEDTSVELIKQLNPTLKEAKIRLKFKEIQKSKEKLTTRVTEEEFCEAFCELCTRPEVYFLLVQI
SKNKEYLDANDLMLFLEAEQGVTHITEDICLDIIRRYELSEEGRQKGFLAIDGFTQYLLSSECDIFDPEQKKVAQ
DMTQPLSHYYINASHNTYLIEDQFRGPADINGYIRALKMGCRSVELDVSDGSDNEPILCNRNNMTTHVSFRSVIE
VINKFAFVASEYPLILCLGNHCSLPQQKVMAQQMKKVFGNKLYTEAPLPSESYLPSPEKLKRMIIVKGKKLPSDP
DVLEGEVTDEDEEAQMSRRMSVDYNGEQKQIRLCRELSDLVSICKSVQYRDFELSMKSQNYWEMCSFSETEASRI
ANEYPEDFVNYNKKFLSRIYPSAMRIDSSNLNPQDFWNCGCQIVAMNFQTPGPMMDLHTGWFLQNGGCGYVLRPS
IMRDEVSYFSANTKGILPGVSPLALHIKIISGQNFPKPKGACAKGDVIDPYVCIEIHGIPADCSEQRTKTVQQNS
DNPIFDETFEFQVNLPELAMIRFVVLDDDYIGDEFIGQYTIPFECLQPGYRHVPLRSFVGDIMEHVTLFVHIAIT
NRSGGGKAQKRSLSVRMGKKVREYTMLRNIGLKTIDDIFKIAVHPLREAIDMRENMQNAIVSIKELCGLPPIASL
KQCLLTLSSRLITSDNTPSVSLVMKDSFPYLEPLGAIPDVQKKMLTAYDLMIQESRFLIEMADTVQEKIVQCQKA
GMEFHEELHNLGAKEGLKGRKLNKATESFAWNITVLKGQGDLLKNAKNEAIENMKQIQLACLSCGLSKAPSSSAE
AKSKRSLEAIEEKESSEENGKL

620/2682 FIGURE 566

GCTGTTGCGCCATCCGCTCCGGCTTTCGTAACCGCACCCTGGGACGCCCAGAGACGCTCCAGCGCGAGTTCCTC AAATGTTTTCCTGCGTTGCCAGGACCGTCCGCCGCTCTGAGTCATGTGCGAGTGGGAAGTCGCACTGACACTGAG $\verb|CCGGGCCAGAGGGAGAGGAGCCGAGGGGCCGAGGGACTCGCAGTGTGTAGAGAGCCGGGCTCCT| \\$ GCGGATGGGGGCTGCCCCGGGGCCTGAGCCCGCCTGCCCACCGCCCCGCCCCCGCCCCTGCCACCCCTGCC ${\tt GCCCGGTTCCCATTAGCCTGTCGCCTCTGCGGGACCATGGAGTGGTAGCCGAGGAGGAAGC{\tt ATGCTGGCCGTCG}}$ GCTGCGCCTGCTGCCCTGCCGCGCGCGCGGGAGCGCGCTGGCCCCAAGGCGCTGCCCTGCGCAGGAGG TGGCAAGAGGCGTGCTGACCAGTCTGCCAGGAGACAGCGTGACTCTGACCTGCCCGGGGGTAGAGCCGGAAGACA CTGTGCACTTGCTGGTGGATGTTCCCCCCGAGGAGCCCCAGCTCTCCTGCTTCCGGAAGAGCCCCCTCAGCAATG TTGTTTGTGAGTGGGGTCCTCGGAGCACCCCATCCCTGACGACAAAGGCTGTGCTCTTGGTGAGGAAGTTTCAGA ACAGTCCGGCCGAAGACTTCCAGGAGCCGTGCCAGTATTCCCAGGAGTCCCAGAAGTTCTCCTGCCAGTTAGCAG TCCCGGAGGGAGACAGCTCTTTCTACATAGTGTCCATGTGCGTCGCCAGTAGTGTCGGGAGCAAGTTCAGCAAAA CTCAAACCTTTCAGGGTTGTGGAATCTTGCAGCCTGATCCGCCTGCCAACATCACAGTCACTGCCGTGGCCAGAA ACCCCGCTGGCTCAGTGTCACCTGGCAAGACCCCCACTCCTGGAACTCATCTTTCTACAGACTACGGTTTGAGC ACGACGCCTGGAGCGCCTGAGGCACGTGGTGCAGCTTCGTGCCCAGGAGGAGTTCGGGCAAGGCGAGTGGAGCG AGTGGAGCCCGGAGGCCATGGGCACGCCTTGGACAGAATCCAGGAGTCCTCCAGCTGAGAACGAGGTGTCCACCC CCATGCAGGCACTTACTACTAATAAAGACGATGATAATATTCTCTTCAGAGATTCTGCAAATGCGACAAGCCTCC CACCGGTGTCCCCCAGCAGCCTGGGGTCTGACAATACCTCGAGCCACAACCGACCAGATGCCAGGGACCCACGGA ${\tt GCCCTTATGACATCAGCAATACAGACTACTTCTTCCCCAGA}{\tt TAGCTGGCTGGGTGGCACCAGCAGCCTGGACCCT}$ GTGGATGACAAAACACAAACGGGCTCAGCAAAAGATGCTTCTCACTGCCATGCCAGCTTATCTCAGGGGTGTGCG GCCTTTGGCTTCACGGAAGAGCCTTGCGGAAGGTTCTACGCCAGGGGAAAATCAGCCTGCTCCAGCTGTTCAGCT GGTTGAGGTTTCAAACCTCCCTTTCCAAATGCCCAGCTTAAAGGGGTTAGAGTGAACTTGGGCCACTGTGAAGAG AACCATATCAAGACTCTTTGGACACTCACACGGACACTCAAAAGCTGGGCAGGTTGGTGGGGGCCTCGGTGTGGA AAAGCCTCCTCCAGCCGCCATGCTCCTGGCCCACTGCATCGTTTCATCTTCCAACTCAAACTCTTAAAACCCAAG TGCCCTTAGCAAATTCTGTTTTTCTAGGCCTGGGGACGGCTTTTACTTAAACGCCAAGGCCTGGGGGAAGAAGCT CTCTCCTCCCTTTCTTCCCTACAGTTCAAAAACAGCTGAGGGTGAGTGGGTGAATAATACAGTATGTCAGGGCCT GGTCGTTTTCAACAGAATTATAATTAGTTCCTCATTAGCAGTTTTGCCTAAATGTGAATGATGATCCTAGGCATT GGGCACAGGGTCTCTACCATCCCCTGTAGAGTGGGAGCTGAGTGGGGGGATCACAGCCTCTGAAAACCAATGTTCT CTGCAGCTTTGTTTGTTGTCAGCTGAACCTGGGTAACTAGGGAAGATAATATTAAGGAAGACAATGTGAAAAGAA AAATGAGCCTGGCAAGAATGCGTTTAAACTTGGTTTTTAAAAAACTGCTGACTGTTTTCTCTTGAGAGGGTGGAA AAAACCAAGTCAAGTGAAAAAGGAGGAAGAGAAAAAATATTTTCCTGCCAGGCATGGAGGCCCACGCACTTCGGG AGGTCGAGGCAGGAGGATCACTTGAGTCCAGAAGTTTGAGATCAGCCTGGGCAATGTGATAAAAACCCCATCTCTA CAAAAAGCATAAAAATTAGCCAAGTGTGGTAGAGTGTGCCTGAAGTCCCAGATACTTGGGGGGCTGAGGTGGGAG GATCTCTTGAGCCTGGGAGGTCAAGGCTGCAGTGAGCCGAGATTGCACCACTGCACTCCAGCCTGGGGTGACAGA GCAAGTGAGACCCTGTCTC

621/2682 FIGURE 567

MLAVGCALLAALLAAPGAALAPRRCPAQEVARGVLTSLPGDSVTLTCPGVEPEDNATVHWVLRKPAAGSHPSRWA
GMGRRLLLRSVQLHDSGNYSCYRAGRPAGTVHLLVDVPPEEPQLSCFRKSPLSNVVCEWGPRSTPSLTTKAVLLV
RKFQNSPAEDFQEPCQYSQESQKFSCQLAVPEGDSSFYIVSMCVASSVGSKFSKTQTFQGCGILQPDPPANITVT
AVARNPRWLSVTWQDPHSWNSSFYRLRFELRYRAERSKTFTTWMVKDLQHHCVIHDAWSGLRHVVQLRAQEEFGQ
GEWSEWSPEAMGTPWTESRSPPAENEVSTPMQALTTNKDDDNILFRDSANATSLPVQDSSSVPLPTFLVAGGSLA
FGTLLCIAIVLRFKKTWKLRALKEGKTSMHPPYSLGQLVPERPRPTPVLVPLISPPVSPSSLGSDNTSSHNRPDA
RDPRSPYDISNTDYFFPR

622/2682 FIGURE 568

623/2682 FIGURE 569

 ${\tt MPHSSDSSDSSFSRSPPPGKQDSSDDVRRVQRREKNRIAAQKSRQRQTQKADTLHLESEDLEKQNAALRKEIKQLTEELKYFTSVLNSHEPLCSVLAASTPSPPEVVYSAHAFHQPHVSSPRFQP}$

624/2682 FIGURE 570

CGGAAGGTGTGAGCCGCAAACCCAGCGGAGGGCGGAAGAAGGAGGAGGCCTCTAGGGTGXTCGGGGGACTGGGG GCCCGCCGGCAGAGGTCCCTCGGCCTCCTGACTGACTGCGGCCGCCCTCCGGCCAGGACGCTGGGAGCTGC $\tt CTGCGGGAAGGTGCGGAGCGAGCC\underline{ATG} GCCTCCGGTGCGTATAACCCGTATATAGAGATAATTGAACAACCC$ GACAACAACCGAACATACCCTTCTATCCAGATTATGAACTATTATGGAAAAGGAAAAGTGAGAATTACATTAGTA ACAAAGAATGACCCATATAAACCTCATCCTCATGATTTAGTTGGAAAAGACTGCAGAGACGGCTACTATGAAGCA GAAGCTATTATTACAAGAATAAAGGCAGGAATCAATCCATTCAATGTCCCTGAAAAAACAGCTGAATGATATTGAA GATTGTGACCTCAATGTGGTGAGACTGTGTTTTCAAGTTTTTCTCCCTGATGAACATGGTAATTTGACGACTGCT CTTCCTCCTGTTGTCTCGAACCCAATTTATGACAACCGTGCTCCAAATACTGCAGAATTAAGGATTTGTCGTGTA AACAAGAATTGTGGAAGTGTCAGAGGAGGAGGAGATGAAATATTTCTACTTTGTGACAAAGTTCAGAAAGATGACATA GAAGTTCGTTTTGTGTTGAACGATTGGGAAGCAAAAGGCATCTTTTCACAAGCTGATGTACACCGTCAAGTAGCC ATTGTTTTCAAAACTCCACCATATTGCAAAGCTATCACAGAACCCGTAACAGTAAAAATGCAGTTGCGGAGACCT TCTGACCAGGAAGTTAGTGAATCTATGGATTTTAGATATCTGCCAGATGAAAAAGATACTTACGGCAATAAAGCA AAGAAACAAAAGACAACTCTGCTTTTCCAGAAACTGTGCCAGGATCACGTAGAAACAGGGTTTCGCCATGTTGAC TTTTCTCATGATGCAGTTGTGAGAGAAATGCCTACAGGGGTTTCAAGTCAAGCAGAATCCTACTATCCCTCACCT GGGCCCATCTCAAGTGGATTGTCACATCATGCCTCAATGGCACCTCTGCCTTCTTCAAGCTGGTCATCAGTGGCC GGTATCCCACCATTCCTGAGAATACCTGTTGGGAATGATTTAAATGCTTCTAATGCTTGCATTTACAACAATGCC GATGACATAGTCGGAATGGAAGCGTCATCCATGCCATCAGCAGATTTATATGGTATTTCTGATCCCAACATGCTG TCTAATTGTTCTGTGAATATGATGACAACCAGCAGTGACAGCATGGGAGAGACTGATAATCCAAGACTTCTGAGC ATGAATCTTGAAAACCCCTCATGTAATTCAGTGTTAGACCCAAGAGACTTGAGACAGCTCCATCAGATGTCCTCT TCCAGTATGTCAGCAGGCGCCAATTCCAATACTACTGTTTTTGTTTCACAATCAGATGCATTTGAGGGATCTGAC TTCAGTTGTGCAGATAACAGCATGATAAATGAGTCGGGACCATCAAACAGTACTAATCCAAACAGTCATGGTTTT GTTCAAGATAGTCAGTATTCAGGTATTGGCAGTATGCAAAATGAGCAATTGAGTGACTCCTTTCCATATGAATTT ATATAAAAAACTTTTTTCAGGGAAGAAGCATACAACTTTGGACATAGCGAATACAAAATTGGAAGCTGTCATAAA AAGACAACTCAGAGGCCAGGCGCAGGXGCTCACACCTGTAATCCTAGCACTTTGGGAGGCCAAGGCGGGTGGATC ACTTGAGACCAG

625/2682 FIGURE 571

MASGAYNPYIEIIEQPRQRGMRFRYKCEGRSAGSIPGEHSTDNNRTYPSIQIMNYYGKGKVRITLVTKNDPYKPH PHDLVGKDCRDGYYEAEFGQERRPLFFQNLGIRCVKKKEVKEAIITRIKAGINPFNVPEKQLNDIEDCDLNVVRL CFQVFLPDEHGNLTTALPPVVSNPIYDNRAPNTAELRICRVNKNCGSVRGGDEIFLLCDKVQKDDIEVRFVLNDW EAKGIFSQADVHRQVAIVFKTPPYCKAITEPVTVKMQLRRPSDQEVSESMDFRYLPDEKDTYGNKAKKQKTTLLF QKLCQDHVETGFRHVDQDGLELLTSGDPPTLASQSAGITVNFPERPRPGLLGSIGEGRYFKKEPNLFSHDAVVRE MPTGVSSQAESYYPSPGPISSGLSHHASMAPLPSSSWSSVAHPTPRSGNTNPLSSFSTRTLPSNSQGIPPFLRIP VGNDLNASNACIYNNADDIVGMEASSMPSADLYGISDPNMLSNCSVNMMTTSSDSMGETDNPRLLSMNLENPSCN SVLDPRDLRQLHQMSSSSMSAGANSNTTVFVSQSDAFEGSDFSCADNSMINESGPSNSTNPNSHGFVQDSQYSGI GSMQNEQLSDSFPYEFFQV

626/2682 FIGURE 572

 ${\tt TCAGCCTCGGCCCTGCGCCCCGGCCCGGCCCGTGCTGCC} \underline{{\tt ATG}} {\tt GCCTGCCGCCGCGAAGCCCGCGAGGCATCA}$ GAGCCGCTGCGACGGTGACGCCAGCCCGCCGCCGCGCGATGGAGCCTGGGACGGAAGCCGAGAGCCGACGG ${\tt CAGGCGCTGGAGGCCCGAAGACGCCGAGGGGGAGGCAGAGCCCGAGGGCGCGAGGCCCGAGAGCCTTTACCAC}$ TCCTGAAGGCCCTAAACCCCGTTCCAGATGCTCTGACTGGGCAAGTGCAGTTGAAGAAGATGAAATGAGGACCAG AGGAAGTTCTGATTCAAAGGAGTCTATGTCTACTGTGCCGGCTGACTTTGAGACAGATGAAAGTGTCCTAATGAG GAGACAGAAGCAGATCAACTATGGGAAGAACACAATTGCCTACGATCGTTATATTAAAGAAGTCCCAAGACACCT TCGACAACCTGGCATTCATCCCAAGACCCCTAATAAATTTAAGAAGTATAGTCGACGTTCATGGGACCAGCAAAT CAAACTCTGGAAGGTGGCTCTGCATTTTTGGGATCCTCCAGCGGAAGAAGGATGTGATTTGCAAGAAATACACCC TGTAGACCTTGAATCTGCAGAAAGCAGCTCCGAGCCCCAGACCAGCTCTCAGGATGACTTTGATGTGTACTCTGG CACACCCACCAAGGTGAGACACATGGACAGTCAAGTGGAGGATGAGTTTGATTTGGAAGCTTGTTTAACTGAACC $\tt CTTGAGAGACTTCTCAGCCATGAGC\underline{TAA}CTGCCCCCTGGCGGCCAGGAAGAGAAACAGCTCCTCCCCGACTAGGT$ GGAAGGCTGGCCAGGCACCAAGCATGTGTGCACTTGTACCTGGTGGTTTCTCTGTTAGCAGTCCATTAGCTCA TGCTGAATTATTTTTGCCTTACTTTCTTAAGAAACATTAATTTTATGTATAGTGAGTATATTTTGCATGTTTTAA ATTGTAAATGGAGCTAAGTCCAAGAAAGTACTTGAAGCTCTCTTCCAGCGAGCTTAATTGCGTAATCCCTGTTGT CCTCCAGGGTAAGCTGACACGTCTACATAACTGGTTTTCCACAGGCATCTTCAGTTATTGCTTGTCAGGTGGACT GTTTTGGATTTAACCATGTAATCCATGGGACCAATTGAGAGTCAGCTACTTTTATAGGCATCAAAGTATTCTCAG ACACCTTTAATATCTTTATGGAAACTTAATTTTTGGCCTTTTATCAATATGTCATAACAGCATTCTGAAGTCAGA CATTGTTAAATTGAGCTATTAAACTAATGAGTTTTATGTAAGTTATATGGTCTTAATTTGGTACTTGTAAATAGC AATCAGTTAATTTACCATGTAAAATTGCTGTAAATGATAATGTGTACAGATTTTCTGTTCAAATATTCAATTGTA ΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑ

627/2682 FIGURE 573

MACRPRSPPRHQSRCDGDASPPSPARWSLGRKRRADGRRWRPEDAEEAEHRGAERRPESFTTPEGPKPRSRCSDW ASAVEEDEMRTRVNKEMARYKRKLLINDFGRERKSSSGSSDSKESMSTVPADFETDESVLMRRQKQINYGKNTIA YDRYIKEVPRHLRQPGIHPKTPNKFKKYSRRSWDQQIKLWKVALHFWDPPAEEGCDLQEIHPVDLESAESSSEPQ TSSQDDFDVYSGTPTKVRHMDSQVEDEFDLEACLTEPLRDFSAMS

628/2682 FIGURE 574

AAGCGGCAGGAGCAGCGTTGGCACCGGCGAACC<u>ATC</u>GCTGGGATTTTCTATTTCGCCCCTATTTTCGTGTCTCTTC GGGATTTGCGACGCTGTCACAGGTTCCAGGGTATACCCCGCGAATGAAGTTACCTTATTGGATTCCAGATCTGTT ACCCGAGAAGGGGCTCAGAGGGTGTATATTGAGATTAAATTCACCTTGAGGGACTGCAATAGTCTTCCGGGCGTC ATGGGGACTTGCAAGGAGACGTTTAACCTGTACTACTATGAATCAGACAACGACAAAGAGCGTTTCATCAGAGAG AACCAGTTTGTCAAAATTGACACCATTGCTGCTGATGAGAGCTTCACCCAAGTGGACATTGGTGACAGAATCATG AAGCTGAACACCGAGATCCGGGATGTAGGGCCATTAAGCAAAAAGGGGTTTTACCTGGCTTTTCAGGATGTGGGG GCCTGCATCGCCCTGGTATCAGTCCGTGTGTTCTATAAAAAGTGTCCACTCACAGTCCGCAATCTGGCCCAGTTT CCTGACACCATCACAGGGGCTGATACGTCTTCCCTGGTGGAAGTTCGAGGCTCCTGTGTCAACAACTCAGAAGAG AAAGATGTGCCAAAAATGTACTGTGGGGCAGATGGTGAATGGCTGCTACCCATTGGCAACTGCCTATGCAACGCT GGGCATGAGGAGCGGAGCGGAGAATGCCAAGCTTGCAAAATTGGATATTACAAGGCTCTCTCCACGGATGCCACC TGTGCCAAGTGCCCACCCCACAGCTACTCTGTCTGGGAAGGAGCCACCTCGTGCACCTGTGACCGAGGCTTTTTC AGAGCTGACAACGATGCTGCCTCTATGCCCTGCACCCGTCCACCATCTGCTCCCCTGAACTTGATTTCAAATGTC AACGAGACATCTGTGAACTTGGAATGGAGTAGCCCTCAGAATACAGGTGGCCGCCAGGACATTTCCTATAATGTG GTATGCAAGAAATGTGGAGCTGGTGACCCCAGCAAGTGCCGACCCTGTGGAAGTGGGGTCCACTACACCCCACAG CAGAATGGCTTGAAGACCACCAAAGTCTCCATCACTGACCTCCTAGCTCATACCAATTACACCTTTGAAATCTGG GCACCATCATCCATTGCTTTGGTCCAGGCTAAAGAAGTCACAAGATACAGTGTGGCACTGGCTTGGCTGGAACCA GATCGGCCCAATGGGGTAATCCTGGAATATGAAGTCAAGTATTATGAGAAGGATCAGAATGAGCGAAGCTATCGT ATAGTTCGGACAGCTGCCAGGAACACAGATATCAAAGGCCTGAACCCTCTCACTTCCTATGTTTTCCACGTGCGA ATTGGAGATGGGGCTAACTCCACAGTCCTTCTGGTCTCTGTCTCGGGCAGTGTGGTGCTGGTGGTAATTCTCATT GAAATTGACGCATCCTGCATTAAGATTGAAAAAGTTATAGGAGTTGGTGAATTTGGTGAGGTATGCAGTGGGCGT CTCAAAGTGCCTGGCAAGAGAGAGATCTGTGTGGCTATCAAGACTCTGAAAGCTGGTTATACAGACAAACAGAGG AGAGACTTCCTGAGTGAGGCCAGCATCATGGGACAGTTTGACCATCCGAACATCATTCACTTGGAAGGCGTGGTC ACTAAATGTAAACCAGTAATGATCATAACAGAGTACATGGAGAATGGCTCCTTGGATGCATTCCTCAGGAAAAAT GATGGCAGATTTACAGTCATTCAGCTGGTGGGCATGCTTCGTGGCATTGGGTCTGGGATGAAGTATTTATCTGAT ATGAGCTATGTGCATCGTGATCTGGCCGCACGGAACATCCTGGTGAACAGCAACTTGGTCTGCAAAGTGTCTGAT TTTGGCATGTCCCGAGTGCTTGAGGATGATCCGGAAGCAGCTTACACCACCAGGGGTGGCAAGATTCCTATCCGG TGGACTGCGCCAGAAGCAATTGCCTATCGTAAATTCACATCAGCAAGTGATGTATGGAGCTATGGAATCGTTATG TGGGAAGTGATGTCGTACGGGGAGAGGCCCTATTGGGATATGTCCAATCAAGATGTGATTAAAGCCATTGAGGAA GGCTATCGGTTACCCCCTCCAATGGACTGCCCCATTGCGCTCCACCAGCTGATGCTAGACTGCTGGCAGAAGGAG AGGAGCGACAGGCCTAAATTTGGGCAGATTGTCAACATGTTGGACAAACTCATCCGCAACCCCAACAGCTTGAAG AGGACAGGGACGGAGAGCTCCAGACCTAACACTGCCTTGTTGGATCCAAGCTCCCCTGAATTCTCTGCTGTGGTA TCAGTGGGCGATTGGCTCCAGGCCATTAAAATGGACCGGTATAAGGATAACTTCACAGCTGCTGGTTATACCACA CTAGAGGCTGTGGTGCACGTGAACCAGGAGGACCTGGCAAGAATTGGTATCACAGCCATCACGCACCAGAATAAG ${\tt ATTTTGAGCAGTGTCCAGGCAATGCGAACCCAAATGCAGCAGATGCACGGCAGAATGGTTCCCGTC} \underline{{\tt TGA}}{\tt GCCAGT}$ ACTGAATAAACTCAAAACTCTTGAAATTAGTTTACCTCATCCATGCACTTTAATTGAAGAACTGCACTTTTTTTA CTTCGTCTTCGCCCTCTGAAATTAAAGAAATG

629/2682 FIGURE 575

MAGIFYFALFSCLFGICDAVTGSRVYPANEVTLLDSRSVQGELGWIASPLEGGWEEVSIMDEKNTPIRTYQVCNV
MEPSQNNWLRTDWITREGAQRVYIEIKFTLRDCNSLPGVMGTCKETFNLYYYESDNDKERFIRENQFVKIDTIAA
DESFTQVDIGDRIMKLNTEIRDVGPLSKKGFYLAFQDVGACIALVSVRVFYKKCPLTVRNLAQFPDTITGADTSS
LVEVRGSCVNNSEEKDVPKMYCGADGEWLVPIGNCLCNAGHEERSGECQACKIGYYKALSTDATCAKCPPHSYSV
WEGATSCTCDRGFFRADNDAASMPCTRPPSAPLNLISNVNETSVNLEWSSPQNTGGRQDISYNVVCKKCGAGDPS
KCRPCGSGVHYTPQQNGLKTTKVSITDLLAHTNYTFEIWAVNGVSKYNPNPDQSVSVTVTTNQAAPSSIALVQAK
EVTRYSVALAWLEPDRPNGVILEYEVKYYEKDQNERSYRIVRTAARNTDIKGLNPLTSYVFHVRARTAAGYGDFS
EPLEVTTNTVPSRIIGDGANSTVLLVSVSGSVVLVVILIAAFVISRRRSKYSKAKQEADEEKHLNQGVRTYVDPF
TYEDPNQAVREFAKEIDASCIKIEKVIGVGEFGEVCSGRLKVPGKREICVAIKTLKAGYTDKQRRDFLSEASIMG
QFDHPNIIHLEGVVTKCKPVMIITEYMENGSLDAFLRKNDGRFTVIQLVGMLRGIGSGMKYLSDMSYVHRDLAAR
NILVNSNLVCKVSDFGMSRVLEDDPEAAYTTRGGKIPIRWTAPEAIAYRKFTSASDVWSYGIVMWEVMSYGERPY
WDMSNQDVIKAIEEGYRLPPPMDCPIALHQLMLDCWQKERSDRPKFGQIVNMLDKLIRNPNSLKRTGTESSRPNT
ALLDPSSPEFSAVVSVGDWLQAIKMDRYKDNFTAAGYTTLEAVVHVNQEDLARIGITAITHQNKILSSVQAMRTQ
MOOMHGRMVPV

630/2682 FIGURE 576A

GATCAATACTGAGGCCGCGTCGACCCCTTGAGCCGAGACCCCCCCAGCCCAGCCCCACCCCACCCCCGCA CACGCCCCACCCCCCACGACCCAGCCTCATACCGCACCAGCTGAGGCACCCAAGAGGATTACCCCCTGGGGCC GAACTTTCCCTCTCGCATGCTTTTCCCCTGCACCACGGATCGCCTCTCGGATGCCGCTTGCCTGGAAGCTGCGTT $AGGAGCGAGCGGCGGCGGCGGCGGCGGCGGCGGCGGCAGCTCGGGAGTGCT \\ \underline{ATG}ACCGGCAAACTCGCC$ GAGAAGCTGCCGGTGACCATGAGCAGTTTGCTAAACCAACTGCCTGACAATCTGTACCCCGAGGAGATCCCCAGC GCGCTCAACCTCTTCTCCGGCAGCAGCGACTCGGTAGTCCATTACAATCAGATGGCTACAGAGAATGTAATGGAC ACCGTGACCTACTTGGGAAAGTTCGCCTTCGACTCCCCTTCCAACTGGTGCCAGGACAACATCATTAGCCTCATG AGCGCCGGCATCTTGGGGGTGCCCCCGGCTTCAGGGGCGCTAAGCACGCAGACGTCCACGGCCAGCATGGTGCAG CCACCGCAGGGTGACGTGGAGGCCATGTATCCCGCGCTACCCCCTACTCCAACTGCGGCGACCTCTACTCAGAG CCCGTGTCTTTCCACGACCCCCAGGGCAATCCCGGGCTCGCCTATTCCCCCCAGGATTACCAATCGGCCAAGCCG GCGTTGGACAGCAATCTCTTCCCCATGATTCCTGACTACAACCTCTACCACCACCCCAACGACATGGGCTCCATT CCGGAGCACAAGCCCTTCCAGGGCATGGACCCCATCCGGGTCAACCCGCCCCCTACTACCCCTCTGGAGACCATC AAGGCATTCAAAGACAAGCAGATCCACCCGGGCTTTGGCAGCCTGCCCCAGCCGCCGCTCACCCTCAAGCCCATC CGGCCCGCAAGTACCCCAACCGGCCTAGCAAGACACCGCTCCACGAACGGCCCCACGCGTGCCCGGCCGAGGGC TGCGACCGCCGTTTCAGCCGTTCGGACGAGCTGACCCGGCACCTGCGCATCCACACGGGCCACAAGCCCTTCCAG TGCCGGATCTGCATGCGGAGCTTCAGCCGCAGCGACCACCTCACCACTCACATCCGCACTCATACGGGCGAGAAG $\tt CCCTTTGCCTGCGGGTTCTGCGGGGCGCAAGTTTGCGCGCAGCGACGACGACGACGACGCCAAGATCCACCTC$ AAGCAAAAGGAGAAGAAGGCGGAGAAGGGCGGTGCACCCTCTGCATCCTCGGCGCCCCCGTGTCGCTGGCCCCC CTGAAAGCAGCGGGAAAGCCAGCCACGGAGGCGTAGGGGCCCCCGGCCCTCGCCTCCATGGACGTGCGGCCCCTT GCTTCCCCTTCGATGCCCCCGGTTCCCAACCTTTCACGCCGGCCAGCGGTCAGGGGCCAGGGCTGGAGGCGCCTT $\verb|CCCTCGCGGTCCCCACTTAGCCAAGGCGTGGGGGGGGAAAGGTGGCGTCTAGCCCGCTTTGTTCAGTTCGGAT| \\$ CGCCTTGATCCAGGGGCCGCCGGGCCGCCCAAGGACCTGCAAGGGACTGAAGGCGGAGCCCATCCAACCCTCGC ACTCTTGAGCTGAACTGGGCTGTGTTTACCCCAAACTCTTCCCCACCTCGGGTCCCCAAGCCGCTGGGAGATGTC CCATGCTGGGGGTCCGCACGTGGCTGGAGGAGGTGGTCTTCCATCCGCTCTGAAATCATGTTTCTTAGAGAAATG CCTCGGATGCCGCCGACGCGGTGCTGCCGCCGCTTCGGGTTTGGCCCCTCAGAACCCCTCCTTTTCTGAGCG ATATGTGTATTTCCTTAGCCCCACTCTAAGAAATCTATGTTCCTGAGTTTGCCCCCTGCCCTCCCACTCCTTCCC GCTTTGTGTCTTCTCTCAATTACATAGCAATTTCTCCTTCCCACCATCATGGGGAAGCTGGCTCTGCTTTTGCCC TGCATGCATGTGTATAAAGATGCACATGCGTACATATACATAACATACACACAATATGTATTCCTAGCAAAATAA AATCTCTAAGGTACTTGGTTATCCAGTGCAGTGCACCGGAATAAAGAGAATTTGTAGGCGTATACAGCTTTAAAT GTGTCTCCTTTCCATACCCAGTCTCACCTTCTCCCCACCCTACCTCACCTCTTCTCAGGCACCCCTCTTCCCCAG CTGTCCTGCCAGCCCTTCTCGTACAGGGTGGCTCCTTTGAAGTGGAGTAATAGGGAAGGTTGCTCTCTGCCACAG AGAAGGAACAAAGGTCTGGAGTTTACAGAATGTCTGTTTTTAAAGTCACTTTATGCGTTTTCCACTTTTTTCTTT TCTAGTGGAAAGGGGGGATATCGAAGAGCAGGGGGTTGTGAATTTCCAGGTACTTGGACTTTTTGTAGAAGTAGA

631/2682 FIGURE 576B

632/2682 FIGURE 577

MTGKLAEKLPVTMSSLLNQLPDNLYPEEIPSALNLFSGSSDSVVHYNQMATENVMDIGLTNEKPNPELSYSGSFQ PAPGNKTVTYLGKFAFDSPSNWCQDNIISLMSAGILGVPPASGALSTQTSTASMVQPPQGDVEAMYPALPPYSNC GDLYSEPVSFHDPQGNPGLAYSPQDYQSAKPALDSNLFPMIPDYNLYHHPNDMGSIPEHKPFQGMDPIRVNPPPT TPLETIKAFKDKQIHPGFGSLPQPPLTLKPIRPRKYPNRPSKTPLHERPHACPAEGCDRRFSRSDELTRHLRIHT GHKPFQCRICMRSFSRSDHLTTHIRTHTGEKPFACEFCGRKFARSDERKRHAKIHLKQKEKKAEKGGAPSASSAP PVSLAPVVTTCA

633/2682 FIGURE 578A

ACCTAAAACCTTGCAAGTTCAGGAAGAAACCATCTGCATCCATATTGAAAACCTGACACAATGTATGCAGCAGGC ${\tt TCAGTGTGAGTGAACTGGAGGCTTCTCTACAAC \underline{\textbf{ATG}}{\tt ACCCAAAGGAGCATTGCAGGTCCTATTTGCAACCTGAAG}$ TTTGTGACTCTCCTGGTTGCCTTAAGTTCAGAACTCCCATTCCTGGGAGCTGGAGTACAGCTTCAAGACAATGGG TATAATGGATTGCTCATTGCAATTAATCCTCAGGTACCTGAGAATCAGAACCTCATCTCAAACATTAAGGAAATG ATAACTGAAGCTTCATTTTACCTATTTAATGCTACCAAGAGAAGAGTATTTTTCAGAAATATAAAGATTTTAATA CCTGCCACATGGAAAGCTAATAATAACAGCAAAATAAAACAAGAATCATATGAAAAAGGCAAATGTCATAGTGACT GACTGGTATGGGGCACATGGAGATGATCCATACACCCTACAATACAGAGGGTGTGGAAAAGAGGGGAAAATACATT CATTTCACACCTAATTTCCTACTGAATGATAACTTAACAGCTGGCTACGGATCACGAGGCCGAGTGTTTGTCCAT GAATGGGCCCACCTCCGTTGGGGTGTTTCGATGAGTATAACAATGACAAACCTTTCTACATAAATGGGCAAAAT AACTGTATTATTAGTAAGCTTTTTTAAAGAAGGATGCACCTTTATCTACAATAGCACCCAAAATGCAACTGCATCA ATAATGTTCATGCAAAGTTTATCTTCTGTGGTTGAATTTTGTAATGCAAGTACCCACAACCAAGAAGCACCAAAC CTACAGAACCAGATGTGCAGCCTCAGAAGTGCATGGGATGTAATCACAGACTCTGCTGACTTTCACCACAGCTTT CCCATGAATGGGACTGAGCTTCCACCTCCCCACATTCTCGCTTGTACAGGCTGGTGACAAAGTGGTCTGTTTA GTGCTGGATGTCCCAGCAAGATGGCAGAGGCTGACAGACTCCTTCAACTACAACAAGCCGCAGAATTTTATTTG ATGCAGATTGTTGAAATTCATACCTTCGTGGGCATTGCCAGTTTCGACAGCAAAGGAGAGATCAGAGCCCAGCTA CACCAAATTAACAGCAATGATGATCGAAAGTTGCTGGTTTCATATCTGCCCACCACTGTATCAGCTAAAACAGAC ATCAGCATTTGTTCAGGGCTTAAGAAAGGATTTGAGGTGGTTGAAAAACTGAATGGAAAAGCTTATGGCTCTGTG ATGATATTAGTGACCAGCGGAGATGATAAGCTTCTTGGCAATTGCTTACCCACTGTGCTCAGCAGTGGTTCAACA ATTCACTCCATTGCCCTGGGTTCATCTGCAGCCCCAAATCTGGAGGAATTATCACGTCTTACAGGAGGTTTAAAG ATTTTCCAGCAACATATTCAGCTTGAAAGTACAGGTGAAAATGTCAAACCTCACCATCAATTGAAAAAACACAGTG ACTGTGGATAATACTGTGGGCAACGACACTATGTTTCTAGTTACGTGGCAGGCCAGTGGTCCTCCTGAGATTATA TTATTTGATCCTGATGGACGAAAATACTACACAAATAATTTTATCACCAATCTAACTTTTCGGACAGCTAGTCTT TGGATTCCAGGAACAGCTAAGCCTGGGCACTGGACTTACACCCTGAACAATACCCATCATTCTCTGCAAGCCCTG AAAGTGACAGTGACCTCTCGCGCCTCCAACTCAGCTGTGCCCCCAGCCACTGTGGAAAGCCTTTGTGGAAAGAGAC AGCCTCCATTTTCCTCATCCTGTGATGATTTATGCCAATGTGAAACAGGGATTTTATCCCATTCTTAATGCCACT GTCACTGCCACAGTTGAGCCAGAGACTGGAGATCCTGTTACGCTGAGACTCCTTGATGATGAGGCAGGTGCTGAT GTTATAAAAATGATGGAATTTACTCGAGGTATTTTTTCTCCTTTGCTGCAAATGGTAGATATAGCTTGAAAGTG CATGTCAATCACTCTCCCAGCATAAGCACCCCAGCCCACTCTATTCCAGGGAGTCATGCTATGTACCAGGT TACACAGCAAACGGTAATATTCAGATGAATGCTCCAAGGAAATCAGTAGGCAGAAATGAGGAGGAGCGAAAGTGG GGCTTTAGCCGAGTCAGCTCAGGAGGCTCCTTTTCAGTGCTGGGAGTTCCAGCTGGCCCCCACCCTGATGTGTTT CCACCATGCAAAATTATTGACCTGGAAGCTGTAAAAGTAGAAGAGGAATTGACCCTATCTTGGACAGCACCTGGA GAAGACTTTGATCAGGGCCAGGCTACAAGCTATGAAATAAGAATGAGTAAAAGTCTACAGAATATCCAAGATGAC TTTAACAATGCTATTTTAGTAAATACATCAAAGCGAAATCCTCAGCAAGCTGGCATCAGGGAGATATTTACGTTC TCACCCCAGATTTCCACGAATGGACCTGAACATCAGCCAAATGGAGAAACACATGAAAGCCACAGAATTTATGTT GCAATACGAGCAATGGATAGGAACTCCTTACAGTCTGCTGTATCTAACATTGCCCAGGCGCCTCTGTTTATTCCC CCCAATTCTGATCCTGTACCTGCCAGAGATTATCTTATATTGAAAGGAGTTTTAACAGCAATGGGTTTGATAGGA ATCATTTGCCTTATTATAGTTGTGACACATCATACTTTAAGCAGGAAAAAGAGAGCAGACAAGAAAAGAGAATGGA ACAAAATTATTA<u>TAA</u>ATAAATATCCAAAGTGTCTTCCTTCTTAGATATAAGACCCATGGCCTTCGACTACAAAAA CATACTAACAAAGTCAAATTAACATCAAAACTGTATTAAAATGCATTGAGTTTTTGTACAATACAGATAAGATTT TTACATGGTAGATCAACAATTCTTTTTGGGGGTAGATTAGAAAACCCTTACACTTTGGCTATGAACAAATAATAA AAATTATTCTTTAAAGTAATGTCTTTAAAGGCAAAGGGAAGGGTAAAGTCGGACCAGTGTCAAGGAAAGTTTGTT TCATTTAGTTACTTTGATTAATTTTTCTTTTCTCCTTATCTGTGCAGAACAGGTTGCTTGTTTACAACTGAAGAT TGAAATCTCACTGCTAATGCTCAGAGATCTTTTTTCACTGTAAGAGGTAACCTTTAACAATATGGGTATTACCTT

634/2682 FIGURE 578B

GCTTTCTAAGTTATTGCCTTGGTTATTATGGATGATAGTTATAGCCCTTATAATGCCTTACCTAGGAAA

635/2682 FIGURE **579**

MTQRSIAGPICNLKFVTLLVALSSELPFLGAGVQLQDNGYNGLLIAINPQVPENQNLISNIKEMITEASFYLFNA
TKRRVFFRNIKILIPATWKANNNSKIKQESYEKANVIVTDWYGAHGDDPYTLQYRGCGKEGKYIHFTPNFLLNDN
LTAGYGSRGRVFVHEWAHLRWGVFDEYNNDKPFYINGQNQIKVTRCSSDITGIFVCEKGPCPQENCIISKLFKEG
CTFIYNSTQNATASIMFMQSLSSVVEFCNASTHNQEAPNLQNQMCSLRSAWDVITDSADFHHSFPMNGTELPPPP
TFSLVQAGDKVVCLVLDVSSKMAEADRLLQLQQAAEFYLMQIVEIHTFVGIASFDSKGEIRAQLHQINSNDDRKL
LVSYLPTTVSAKTDISICSGLKKGFEVVEKLNGKAYGSVMILVTSGDDKLLGNCLPTVLSSGSTIHSIALGSSAA
PNLEELSRLTGGLKFFVPDISNSNSMIDAFSRISSGTGDIFQQHIQLESTGENVKPHHQLKNTVTVDNTVGNDTM
FLVTWQASGPPEIILFDPDGRKYYTNNFITNLTFRTASLWIPGTAKPGHWTYTLNNTHHSLQALKVTVTSRASNS
AVPPATVEAFVERDSLHFPHPVMIYANVKQGFYPILNATVTATVEPETGDPVTLRLLDDGAGADVIKNDGIYSRY
FFSFAANGRYSLKVHVNHSPSISTPAHSIPGSHAMYVPGYTANGNIQMNAPRKSVGRNEEERKWGFSRVSSGGSF
SVLGVPAGPHPDVFPPCKIIDLEAVKVEEELTLSWTAPGEDFDQGQATSYEIRMSKSLQNIQDDFNNAILVNTSK
RNPQQAGIREIFTFSPQISTNGPEHQPNGETHESHRIYVAIRAMDRNSLQSAVSNIAQAPLFIPPNSDPVPARDY
LILKGVLTAMGLIGIICLIIVVTHHTLSRKKRADKKENGTKLL

636/2682 FIGURE 580

TGTGCAGGACGAGTCCCCACCACCACCACCACCACGCCGCTGAATGAGGCTTCCAGGCGTCCGCTCGCGGCCCGC ${\tt CAACCCGGGAACGGCAGCGCCTTCTTGCTGGCACCCAATAGAAGCCATGCGCCGGACCACGACGTCACGCAGCAA}$ AGGGACGAGGTGTGGGTGGTGGGCATGGCCATCGTCATGTCTCTCATCGTCCTGGCCATCGTGTTTGGCAATGTG CTGGTCATCACAGCCATTGCCAAGTTCGAGCGTCTGCAGACGGTCACCAACTACTTCATCACTTCACTGGCCTGT GCTGATCTGGTCATGGGCCTGGCAGTGGTGCCCTTTGGGGCCCCCATATTCTTATGAAAATGTGGACTTTTGGC AACTTCTGGTGCGAGTTTTGGACTTCCATTGATGTGCTGTGCGTCACGGCCAGCATTGAGACCCTGTGCGTGATC GCAGTGGATCGCTACTTTGCCATTACTTCACCTTTCAAGTACCAGAGCCTGCTGACCAAGAATAAGGCCCGGGTG ATCATTCTGATGGTGTGGATTGTCTCAGGCCTTACCTCCTTCTTGCCCATTCAGATGCACTGGTACCGGGCCACC CACCAGGAAGCCATCAACTGCTATGCCAATGAGACCTGCTGTGACTTCTTCACGAACCAAGCCTATGCCATTGCC TCTTCCATCGTGTCCTTCTACGTTCCCCTGGTGATCATGGTCTTCGTCTACTCCAGGGTCTTTCAGGAGGCCAAA AGGCAGCTCCAGAAGATTGACAAATCTGAGGGCCGCTTCCATGTCCAGAACCTTAGCCAGGTGGAGCAGGATGGG CGGACGGGCATGGACTCCGCAGATCTTCCAAGTTCTGCTTGAAGGAGCACAAAGCCCTCAAGACGTTAGGCATC ATCATGGGCACTTTCACCCTCTGCTGGCTGCCCTTCTTCATCGTTAACATTGTGCATGTGATCCAGGATAACCTC ATCCGTAAGGAAGTTTACATCCTCCTAAATTGGATAGGCTATGTCAATTCTGGTTTCAATCCCCTTATCTACTGC CGGAGCCCAGATTTCAGGATTGCCTTCCAGGAGCTTCTGTGCCTGCGCAGGTCTTCTTTGAAGGCCTATGGGAAT TGTGAAGACCTCCCAGGCACGGAAGACTTTGTGGGCCATCAAGGTACTGTGCCTAGCGATAACATTGATTCACAA GGGAGGAATTGTAGTACAAATGACTCACTGCTG**TAA**AGCAGTTTTTCTACTTTTAAAGACCCCCCCCCCCCAAC AGAACACTAAACAGACTATTTAACTTGAGGGTAATAAACTTAGAATAAAATTGTAAAAATTGTATAGAGATATGC AGAAGGAAGGGCATCCTTCTGCCTTTTTTATTTTTTTAAGCTGTAAAAAAGAGAAAACTTATTTGAGTGATTAT TTGTTATTTGTACAGTTCAGTTCCTCTTTGCATGGAATTTGTAAGTTTATGTCTAAAGAGCTTTAGTCCTAGAGG ACCTGAGTCTGCTATATTTTCATGACTTTTCCATGTATCTACCTCACTATTCAAGTATTAGGGGTAATATATTGC TGCTGGTAATTTGTATCTGAAGGAGATTTTCCTTCCTACACCCTTGGACTTGAGGATTTTGAGTATCTCGGACCT TTCAGCTGTGAACATGGACTCTTCCCCCACTCCTTATTTGCTCACACGGGGTATTTTAGGCAGGGATTTGAGG

637/2682 FIGURE 581

$$\label{thm:control} \begin{align} MGQPGNGSAFLLAPNRSHAPDHDVTQQRDEVWVVGMGIVMSLIVLAIVFGNVLVITAIAKFERLQTVTNYFITSL\\ ACADLVMGLAVVPFGAAHILMKMWTFGNFWCEFWTSIDVLCVTASIETLCVIAVDRYFAITSPFKYQSLLTKNKA\\ RVIILMVWIVSGLTSFLPIQMHWYRATHQEAINCYANETCCDFFTNQAYAIASSIVSFYVPLVIMVFVYSRVFQE\\ AKRQLQKIDKSEGRFHVQNLSQVEQDGRTGHGLRRSSKFCLKEHKALKTLGIIMGTFTLCWLPFFIVNIVHVIQD\\ NLIRKEVYILLNWIGYVNSGFNPLIYCRSPDFRIAFQELLCLRRSSLKAYGNGYSSNGNTGEQSGYHVEQEKENK\\ LLCEDLPGTEDFVGHQGTVPSDNIDSQGRNCSTNDSLL\\ \end{align*}$$

638/2682 FIGURE 582

CCTCTCCTTGACCTTCGTGCTGTTTCTCTCCCTGGCTTTTGGGGCAAGCTACGGAACAGGTGGGCGCATGATGAA GAACAAAAGCATCCACATTGTCGTCACAATGGCAAAATCACTGGAGAACAGTGTCGAGAACAAAATAGTGTCTCT TGATCCATCCGAAGCAGGCCCTCCACGTTATCTAGGAGATCGCTACAAGTTTTATCTGGAGAATCTCACCCTGGG GATACGGGAAAGCAGGAGGAGGATGAGGGATGCTTATGACCCTGGAGAAAAATGTTTCAGTTCAGCGCTT TTGCCTGCAGTTGAGGCTTTATGAGCAGGTCTCCACTCCAGAAATTAAAGTTTTAAACAAGACCCAGGAGAACGG GACCTGCACCTTGATACTGGGCTGCACAGTGGAGAAGGGGGGACCATGTGGCTTACAGCTGGAGTGAAAAGGCGGG CACCCACCACTGAACCCAGCCAACAGCTCCCACCTCCTGTCCCTCACCCTCGGCCCCCAGCATGCTGACAATAT CTACATCTGCACCGTGAGCAACCCTATCAGCAACAATTCCCAGACCTTCAGCCCGTGGCCCGGATGCAGGACAGA CCCCTCAGAAACAAACCATGGGCAGTGTATGCTGGGCTGTTAGGGGGTGTCATCATGATTCTCATCATGGTGGT TGCCCAAGTCCAGAAACCAGGTCCTCTTCAGAAGAAACTTGACTCCTTCCCAGCTCAGGACCCTTGCACCACCAT ATATGTTGCTGCCACAGAGCCTGTCCCAGAGTCTGTCCAGGAAACAAATTCCATCACAGTCTATGCTAGTGTGAC ACTTCCAGAGAGCTGACACCAGAGACCAACAAAGGGACTTTCTGAAGGAAAATGGAAAAACCAAAATGAACACTG AACTTGGCCACAGGCCCAAGTTTCCTCTGGCAGACATGCTGCACGTCTGTACCCTTCTCAGATCAACTCCCTGGT GATGTTTCTTCCACATACATCTGTGAAATGAACAAGGAAGTGAGGCTTCCCAAGAATTTAGCTTGCTGTGCAGTG GCTGCAGGCGCAGAACAGAGCGTTACTTGATAACAGCGTTCCATCTTTGTGTTGTAGCAGATGAAATGGACAGTA ATGTGAGTTCAGACTTTGGGCATCTTGCTCTTGGCTGGAACTGATAATAAAAATCAGACTGAAAGCCAGGACATC TGAGTACCTATCTCACACACTGACCACCAGTCACAAAGTCTGGAAAAGTTTACATTTTGGCTATCTTTACTTTGT GAATAGAGGCCGAAGGGTGAATTTCTTATTATACATAAAACACTCTGATATTATTGTATAAAGGAAGCTAAGAAT

639/2682 FIGURE 583

MDPKGLLSLTFVLFLSLAFGASYGTGGRMMNCPKILRQLGSKVLLPLTYERINKSMNKSIHIVVTMAKSLENSVE NKIVSLDPSEAGPPRYLGDRYKFYLENLTLGIRESRKEDEGWYLMTLEKNVSVQRFCLQLRLYEQVSTPEIKVLN KTQENGTCTLILGCTVEKGDHVAYSWSEKAGTHPLNPANSSHLLSLTLGPQHADNIYICTVSNPISNNSQTFSPW PGCRTDPSETKPWAVYAGLLGGVIMILIMVVILQLRRRGKTNHYQTTVEKKSLTIYAQVQKPGPLQKKLDSFPAQ DPCTTIYVAATEPVPESVQETNSITVYASVTLPES

640/2682 FIGURE 584

641/2682 FIGURE 585

 ${\tt MSLLPVPYTEAASLSTGSTVTIKGRPLACFLNEPYLQVDFHTEMKEESDIVFHFQVCFGRRVVMNSREYGAWKQQVESKNMPFQDGQEFELSISVLPDKYQVMVNGQSSYTFDHRIKPEAVKMVQVWRDISLTKFNVSYLKR}$

642/2682 FIGURE 586

GCTGGTCGGAGGCTCGCAGTGCTGTCGGCGAGAAGCAGTCGGGTTTGGAGCGCTTGGGTCGCGTTGGTGCGCGGT GGAACGCCCCAGGGACCCCAGTTCCCGCGAGCAGCTCCGCGCCGCGCCTGAGAGACTAAGCTGAAACTGCTGCT $\texttt{CAGCTCCCAAG} \underline{\textbf{ATG}} \texttt{GTGCCACCCAAATTGCATGTGCTTTTCTGCCTCTGCGGCTGCCTGGCTGTGTTTATCCTT}$ TTGACTGGCAATACATAAATCCTGTTGCCCATATGAAATCATCAGCATGGGTCAACAAAATACAAGTACTGATGG GGATCCCAAATAAAGAATATTTTTGGGGTCTTAGCAAATTTCTTGGAACACACTGGCTTATGGGCAACATTTTGA GGTTACTCTTTGGTTCAATGACAACTCCTGCAAACTGGAATTCCCCTCTGAGGCCTGGTGAAAAATATCCACTTG TTGTTTTTCTCATGGTCTTGGGGCATTCAGGACACTTTATTCTGCTATTGGCATTGACCTGGCATCTCATGGGT TTATAGTTGCTGCTGTAGAACACAGAGATAGATCTGCATCTGCAACTTACTATTTCAAGGACCAATCTGCTGCAG AAATAGGGGACAAGTCTTGGCTCTACCTTAGAACCCTGAAACAAGAGGAGGAGACACATATACGAAATGAGCAGG TACGGCAAAGAGCAAAAGAATGTTCCCAAGCTCTCAGTCTGATTCTTGACATTGATCATGGAAAGCCAGTGAAGA ATGCATTAGATTTAAAGTTTGATATGGAACAACTGAAGGACTCTATTGATAGGGAAAAAATAGCAGTAATTGGAC ATTCTTTTGGTGGAGCAACGGTTATTCAGACTCTTAGTGAAGATCAGAGATTCAGATGTGGTATTGCCCTGGATG CATGGATGTTTCCACTGGGTGATGAAGTATATTCCAGAATTCCTCAGCCCCTCTTTTTTATCAACTCTGAATATT GGGGTTCAGTCCACCAGAATTTTGCTGACTTCACTTTTGCAACTGGCAAAATAATTGGACACATGCTCAAATTAA AGGGAGACATAGATTCAAATGTAGCTATTGATCTTAGCAACAAAGCTTCATTAGCATTCTTACAAAAGCATTTAG TTAACACAACCAATCAACACATCATGTTACAGAACTCTTCAGGAATAGAGAAATACAAT**TAG**GATTAAAATAGGT TTTTT

643/2682 FIGURE 587

MVPPKLHVLFCLCGCLAVVYPFDWQYINPVAHMKSSAWVNKIQVLMAAASFGQTKIPRGNGPYSVGCTDLMFDHT NKGTFLRLYYPSQDNDRLDTLWIPNKEYFWGLSKFLGTHWLMGNILRLLFGSMTTPANWNSPLRPGEKYPLVVFS HGLGAFRTLYSAIGIDLASHGFIVAAVEHRDRSASATYYFKDQSAAEIGDKSWLYLRTLKQEEETHIRNEQVRQR AKECSQALSLILDIDHGKPVKNALDLKFDMEQLKDSIDREKIAVIGHSFGGATVIQTLSEDQRFRCGIALDAWMF PLGDEVYSRIPQPLFFINSEYFQYPANIIKMKKCYSPDKERKMITIRGSVHQNFADFTFATGKIIGHMLKLKGDI DSNVAIDLSNKASLAFLQKHLGLHKDFDQWDCLIEGDDENLIPGTNINTTNQHIMLQNSSGIEKYN

644/2682 FIGURE 588

GAGAGACTGGATGGACCCACAAGGGTGACAGCCCAGGCGGACCGATCTTCCCATCCCACATCCTCCGGCGCGATG CCAAAAAGAGGCTGACGGCAACTGGGCCTTCTGCAGAGAAAGACCTCCGCTTCACTGCCCCGGCTGGTCCCAAGG GTCAGGAAGATGGATTCATACCTGCTGATGTGGGGACTGCTCACGTTCATCATGGTGCCTGGCTGCCAGGCAGAG AACTGTGAATGCAAGAGAGGTTTCCGCAGAATAAAAAGCGGGTCACTCTATATGCTCTGTACAGGAAACTCTAGC CACTCGTCCTGGGACAACCAATGTCAATGCACAAGCTCTGCCACTCGGAACACAACGAAACAAGTGACACCTCAA CCTGAAGAACAGAAAGGAAAACCACAGAAATGCAAAGTCCAATGCAGCCAGTGGACCAAGCGAGCCTTCCA GGTCACTGCAGGGAACCTCCACCATGGGAAAATGAAGCCACAGAGAGAATTTATCATTTCGTGGTGGGGCAGATG GTTTATTATCAGTGCGTCCAGGGATACAGGGCTCTACACAGAGGTCCTGCTGAGAGCGTCTGCAAAATGACCCAC AAGCCTCAGGCAAGCCCCGAAGGCCGTCCTGAGAGTGAGACTTCCTGCCTCGTCACAACAACAGATTTTCAAATA CAGACAGAAATGGCTGCAACCATGGAGACGTCCATATTTACAACAGAGTACCAGGTAGCAGTGGCCGGCTGTTTT TTCCTGCTGATCAGCGTCCTCCTGAGTGGGCTCACCTGGCAGCGGAGACAGAGGAAGAGTAGAAGAACAATC TAGAAAACCAAAAGAACAAGAATTTCTTGGTAAGAAGCCGGGAACAGACAACAGAAGTCATGAAGCCCAAGTGAA ATCANAGGTGCTAAATGGTCGCCCAGGAGACATCCGTTGTGCTTGCCTGCGTTTTTGGAAGCTCTGAAGTCACATC ACAGGACACGGGGCAGTGGCAACCTTGTCTCTATGCCAGCTCAGTCCCATCAGAGAGGCGCAGCGCTACCCACTTCT AAATAGCAATTTCGCCGTTGAAGAGGGAAGGGCAAAACCACTAGAACTCTCCATCTTATTTTCATGTATATGTGTT CATTAAAGCATGAATGGTATGGAACTCTCTCCACCCTATATGTAGTATAAAGAAAAGTAGGTTTACATTCATCTC CTATACAACTGGACATTGTCTGCGTGGTTCCTTTCTCAGCCGCTTCTGACTGCTGATTCTCCCGTTCACGTTGCC TAATAAACATCCTTCAAGAACTCTGGGCTGCTACCCAGAAATCATTTTACCCTTGGCTCAATCCTCTAAGCTAAC CCCCTTCTACTGAGCCTTCAGTCTTGAATTTCTAAAAAACAGAGGCCATGGCAGAATAATCTTTGGGTAACTTCA CCTGAATTTGGCCTGCACTAATTTGATGTTTACAGGTGGACACACAAGGTGCAAATCAATGCGTACGTTTCCTGA <u>AGAGGGAGAAGGGATGGAGGTCACACTGGTAGAACGTAACCACGGAAAAGAGCGCATCAGGCCTGGCACGGTGGC</u> TCAGGCCTATAACCCCAGCTCCCTAGGAGACCAAGGCGGGAGCATCTCTTGAGGCCAGGAGTTTGAGACCAGCCT GGGCAGCATAGCAAGACACATCCCTACAÁAAAATTAGAAATTGGCTGGATGTGGTGGCATACGCCTGTAGTCCTA

645/2682 FIGURE 589

MDSYLLMWGLLTFIMVPGCQAELCDDDPPEIPHATFKAMAYKEGTMLNCECKRGFRRIKSGSLYMLCTGNSSHSS WDNQCQCTSSATRNTTKQVTPQPEEQKERKTTEMQSPMQPVDQASLPGHCREPPPWENEATERIYHFVVGQMVYY QCVQGYRALHRGPAESVCKMTHGKTRWTQPQLICTGEMETSQFPGEEKPQASPEGRPESETSCLVTTTDFQIQTE MAATMETSIFTTEYQVAVAGCVFLLISVLLLSGLTWQRRQRKSRRTI

646/2682 FIGURE 590

ATCTTTTTCATCTTCTAGCTGTAGCTCGGGCTGCTTGTCGGCTTGGCTCCCCCCCTTTGCTCTCTGCCT AAAAATAATAAAGAGAGCCAAGCAGAAGAGGAGGCGAGAAGCATGAAGTGTTAACTCCCCCGTGCCAAGGCCCGC CGGCGACGGCGAGCCCTTCCTTATGCAAAGCGCGCCAGCAGCGCGAAGGCGGGACGCCGCGCACCGGGCCGGGCT CCTCCAGCTTCGCCGCCGCGCCACCACCGCCGCCACCGCAGCTCGCGGAGGATCTTCCCGAGCCTGAAGCCGCC CCACCGCCGCGCAAGCTAGAAGCGCCCCAGCCCGGCAAGCTGGCTCACCCGCTGGCCACCCAGCACAGCCCGCTG GCCCCTCTCCTGCAGCCCATCTGGCGGAGCGGCGGCGGCGGCGGCGGCGGCAGAATGCCATCAGAACTGGCA ATGAGCAACTCCGACCTGCCCACCAGTCCCCTGGCCATGGAATATGTTAATGACTTCGATCTGATGAAGTTTGAA GTGAAAAAGGAACCGGTGGAGACCGACCGCATCATCAGCCAGTGCGGCCGTCTCATCGCCGGGGGCTCGCTGTCC AGCGAGCAGAAGGCGCACCTGGAAGACTACTACTGGATGACCGGCTACCCGCAGCAGCTGAACCCCGAGGCGCTG GGCTTCAGCCCCGAGGACGCGGTCGAGGCGCTCATCAGCAACAGCCACCAGCTCCAGGGCGGCTTCGATGGCTAC ATGGGCCCGCGGCCGCGTGTTCCGCCGTGATCGCCGCGCCGCGCGCAGAGCGGCGCGGGCCCGCACTAC TTCGACGACCGCTTCTCCGACGAGCAGCTGGTGACCATGTCTGTGCGCGGAGCTGAACCGGCAGCTGCGCGGGGTC AGCAAGGAGGAGGTGATCCGGCTGAAGCAGAAGAGGCGGACCCTGAAAAACCGCGGCTATGCCCAGTCCTGCCGC TTCAAGAGGGTGCAGCAGAGACACGTCCTGGAGTCGGAGAAGAACCAGCTGCTGCAGCAAGTCGACCACCTCAAG CAGGAGATCTCCAGGCTGGTGCGCGAGAGGGACGCGTACAAGGAGAAATACGAGAAGTTGGTGAGCAGCGGCTTC CGAGAAAACGGCTCGAGCAGCGACAACCCGTCCTCTCCCGAGTTTTTCATAACTGAGCCCACTCGCAAGTTGGAG CCATCAGTGGGATACGCCACATTTTGGAAGCCCCAGCATCGTGTACTTACCAGTGTGTTCACAAAA**TGA**AATTTG TGTGAGAGCTGTACATTAAAAAAAACATCATTATTATTATTATTTGCAGTCATGGAGAACCACCTACCCCTGACT

647/2682 FIGURE 591

648/2682 FIGURE **592**

AGCTCAGCAGGACCTCAGCCATGAGACTTCTCATCCTGGCCCTCCTTGGCATCTGCTCTCTCACTGCATACATTG TGGAAGGTGTAGGGAGTGAAGTCTCAGATAAGAGGACCTGTGTGAGCCTCACTACCCAGCGACTGCCGGTTAGCA GAATCAAGACCTACACCATCACGGAAGGCTCCTTGAGAGCAGTAATTTTTATTACCAAACGTGGCCTAAAAGTCT GTGCTGATCCACAAGCCACATGGGTGAGAGACGTGGTCAGGAGCATGGACAGGAAATCCAACACCAGAAATAACA ${\tt CACCCTGTCCGTCTCCAGCCAGCCAGCTCATTTCACTTTACACGCTCATGGACTGAGTTTATACTCACCTTTTAT}$ GAAAGCACTGCATGAATAAAATTATTCCTTTGTATTTTTACTTTTAAATGTCTTCTGTATTCACTTATATGTTCT AATTAATAAATTATTATTAATAAGAATAGTTCCCTAGTCTATTCATTATATTTAGGGAAAGGTAGTGTATCATT GTTGTTTGATCTTGACCTTGTACCTCTCTTTGATGGTAACCATAATGGAAGAGTTCTGGCTAGTGTCTATCAG AGGTGAAAGCTATATCAATCTCTCTTAGAGTCCAGCTTGTAATGGTTCTTTACACATCAGTCACAAGTTACAGCT GTGACAATGGĆAACAATTTGAGATGTATTTCAACTTGTCTCTATAATAGAATTCTGTTTATAGAATAAGGGAGAA AATAATCCAGTCTTCACTGGGTTCCCATTCTGAGGGTCCACTACTCAAAAATTTGCTTCACTCAATTTTTTTCAC CTCTTTGTGTTTTATTTTGGTGTCCTATTAAAGGAATAAAATGACACAACTTGTCCCTTTTTTGTCCCATTAGCA AAAATTAGAATTTTGGTATAAAGAAACTTTATTCAAGTAAAAATCAATACCCTTTGAATTGGACAATAATCTCAC ATCTGGTAACTCAACACCCCAG

649/2682 FIGURE 593

MRLLILALLGICSLTAYIVEGVGSEVSDKRTCVSLTTQRLPVSRIKTYTITEGSLRAVIFITKRGLKVCADPQAT WVRDVVRSMDRKSNTRNNMIQTKPTGTQQSTNTAVTLTG

650/2682 FIGURE **594**

GGCGGCCATCACCAGCCACATGCGGTCGCGACGCTGGGTCTACTATTGCCTGGTGAACATCACGCTGAGTGACCT GCTCACGGGCGCGCCTACCTGGCCAACGTGCTGCTGTCGGGGGCCCGCACCTTCCGTCTGGCGCCCCAGTG GTTCCTACGGGAGGGCCTGCTCTTCACCGCCCTGGCCGCCTCCACCTTCAGCCTGCTCTTCACTGCAGGGGAGCG CTTTGCCACCATGGTGCGGCCGGTGGCCGAGAGCGGGGCCACCAAGACCAGCCGCGTCTACGGCTTCATCGGCCT CTGCTGGCTGCCGCGCTGCTGGGGATGCTGCCTTTGCTGGGCTGGAACTGCCTGTGCGCCTTTGACCGCTG CCGCAAGGCCCGCCGCCTGCTGAAGACGGTGCTGATGATCCTGCTGGCCTTCCTGGTGTGCTGGGGCCCACTCTT $\tt CGGGCTGCTGGCCGACGTCTTTGGCTCCAACCTCTGGGCCCAGGAGTACCTGCGGGGCATGGACTGGATCCT$ GGCCCTGGCCGTCCTCAACTCGGCGGTCAACCCCATCATCTACTCCTTCCGCAGCAGGAGGTGTGCAGAGCCGT GCTCAGCTTCCTCTGCTGCGGGTGTCTCCGGCTGGGCATGCGAGGGCCCGGGGACTGCCTGGCCCGGGCCGTCGA $\tt CTTTCGGATGCGGGAGCCCCTGTCCAGCATCTCCAGCGTGCGGAGCATC\underline{TGA}{A}GTTGCAGTCTTGCGTGTGGATG$ GTGCAGCCACCGGGTGCCTGCCAGGCAGCCCTCCTGGGGTACAGGAAGCTGTGTGCACGCAGCCTCGCCTGTAT GGGGAGCAGGGAACGGGACAGGCCCCCATGGTCTTCCCGGTGGCCTCTCGGGGCTTCTGACGCCAAATGGGCTTC CCATGGTCACCCTGGACAAGGAGGTAACCACCCCACCTCCCGTAGGAGCAGAGCACCCTGGTGTGGGGGCGA GTGGTTCCCCACAACCCCGCTTCTGTGTGATTCTGGGGGAAGTCCCGGCCCCTCTCTGGGCCTCAGTAGGGCTCCC AGGCTGCAAGGGGTGGACTGTGGGATGCATGCCCTGGCAACATTGAAGTTCGATCATGGTAAAAAA

651/2682 FIGURE 595

MNATGTPVAPESCQQLAAGGHSRLIVLHYNHSGRLAGRGGPEDGGLGALRGLSVAASCLVVLENLLVLAAITSHM RSRRWVYYCLVNITLSDLLTGAAYLANVLLSGARTFRLAPAQWFLREGLLFTALAASTFSLLFTAGERFATMVRP VAESGATKTSRVYGFIGLCWLLAALLGMLPLLGWNCLCAFDRCSSLLPLYSKRYILFCLVIFAGVLATIMGLYGA IFRLVQASGQKAPRPAARRKARRLLKTVLMILLAFLVCWGPLFGLLLADVFGSNLWAQEYLRGMDWILALAVLNS AVNPIIYSFRSREVCRAVLSFLCCGCLRLGMRGPGDCLARAVEAHSGASTTDSSLRPRDSFRGSRSLSFRMREPL SSISSVRSI

652/2682 FIGURE 596

 $\tt GTGGGCAGCCGAGCCGCGAACTGCATC{\color{red} ATG}{\color{blue} GAGAATTTTGTAGCCACCTTGGCTAATGGGATGAGCCTCCAGCC}$ GCCTCTTGAAGAAGTGTCCTGTGGCCAGGCGGAAAGCAGTGAGAAGCCCAACGCTGAGGACATGACATCCAAAGA TTACTACTTTGACTCCTACGCACACTTTGGCATCCACGAGGAGGATGCTGAAGGACGAGGTGCGCACCCTCACTTA CCGCAACTCCATGTTTCATAACCGGCACCTCTTCAAGGACAAGGTGGTGCTGGACGTCGGCTCGGGCACCGGCAT CCTCTGCATGTTTGCTGCCAAGGCCGGGGCCCGCAAGGTCATCGGGATCGTGTTTCCAGTATCTCTGATTATGC GGTGAAGATCGTCAAAGCCAACAAGTTAGACCACGTGGTGACCATCATCAAGGGGAAGGTGGAGGAGGTGGAGCT GTGCTCTATGCCCGGGACAAGTGTGGCGCCCGATGGCCTCATCTTCCCAGACCGGGCCACGCTGTATGTGACGGC CATCGAGGACCGGCAGTACAAAGACTACAAGATCCACTGGTGGGAGAACGTGTATGGCTTCGACATGTCTTGCAT GAATGACTACGTGCACGCCCTGGTGGCCTACTTCAACATCGAGTTCACACGCTGCCACAAGAGGACCGGCTTCTC CACCAGCCCGAGTCCCCGTACACGCACTGGAAGCAGACGGTGTTCTACATGGAGGACTACCTGACCGTGAAGAC GGGCGAGGAGATCTTCGGCACCATCGGCATGCGGCCCAACGCCAAGAACAACCGGGACCTGGACTTCACCATCGA $\texttt{CCTGGACTTCAAGGGCCAGCTGTCCGACTGCTCCACCGACTACCGGATGCGC} \underline{\textbf{TGA}} \\ \texttt{GGCCCGGCTCTCCCC} \\$ AAGGGGGTTTTAGGGGCCTGGGCTGGGGGGATGGGGAGGGCACATCGTGACTGTGTTTTTCATAACTTATGTTTT TATATGGTTGCATTTACGCCAATAAATCCTCAGCTGGG

653/2682 FIGURE 597

MENFVATLANGMSLQPPLEEVSCGQAESSEKPNAEDMTSKDYYFDSYAHFGIHEEMLKDEVRTLTYRNSMFHNRH LFKDKVVLDVGSGTGILCMFAAKAGARKVIGIVCSSISDYAVKIVKANKLDHVVTIIKGKVEEVELPVEKVASSS ASGWATASSTSPCSTPCSMPGTSVAPDGLIFPDRATLYVTAIEDRQYKDYKIHWWENVYGFDMSCIKDVAIKEPL VDVVDPKQLVTNACLIKEVDIYTVKVEDLTFTSPFCLQVKRNDYVHALVAYFNIEFTRCHKRTGFSTSPESPYTH WKQTVFYMEDYLTVKTGEEIFGTIGMRPNAKNNRDLDFTIDLDFKGQLCELSCSTDYRMR

654/2682 FIGURE 598

CACGGCCCTGCTCTGTTCCCTGGGACACCCCCGCCCCCACCTCCTCAGGCTGCCTGATCTGCCCAGCTTTCCAGC TTTCCTCTGGATTCCGGCCTCTGGTCATCCCTCCCCACCCTCTCTCCAAGGCCCTCTCCTGGTCTCCCTTCTTCT AGAACCCCTTCCTCCACCTCCCTCTCTGCAGAACTTCTCCTTTACCCCCCACCCCCACCACTGCCCCCTTTCCT TTTCTGACCTCCTTTTGGAGGGCTCAGCGCTGCCCAGACCATAGGAGAGAATGTGGGGAGGCTCAGTTCCTGGGCTT CCAGGAGGGGGCTCCTGCCCAGCTCCCCTGCAGCCCCACAATCCCCCTCCAGGATCTCAGCCTTCTGCGAAGAGC ${\tt TCACCCGGCGCCCCTCCTCCTGGGGGCCCCAGGCCCCGCCGCTACACGGTGCTGAGCGTGGGTCCCGGAGGCCT}$ ATGGCTGCGCCCAGCCCGGCGCGCGCGCGCGAGTACCGCGCCGCGGTGCACCTCAGGGACCGCCCCTCTC CTGCCGCCTCCGTCTGCGCCTGGGCCAGGCCTCGATGACTGCCAGCCCCCCAGGATCTCTCAGAGCCTCCGACTG GGTCATTTTGAACTGCTCCTTCAGCCGCCCTGACCGCCCCAGCCTCTGTGCATTGGTTCCGGAACCGGGGCCAGGG CCGAGTCCCTGTCCGGGAGTCCCCCCATCACCACTTAGCGGAAAGCTTCCTCTTCCTGCCCCAAGTCAGCCCCAT GGACTCTGGGCCCTGGGGCTGCATCCTCACCTACAGAGATGGCTTCAACGTCTCCATCATGTATAACCTCACTGT TCTGGGTCTGGAGCCCCCAACTCCCTTGACAGTGTACGCTGGAGCAGGTTCCAGGGTGGGGCTGCCCTGCCGCCT GCCTGCTGGTGTGGGGACCCGGTCTTTCCTCACTGCCAAGTGGACTCCTCCTGGGGGAGGCCCTGACCTCCTGGT GACTGGAGACAATGGCGACTTTACCCTTCGACTAGAGGATGTGAGCCAGGCCCAGGCTGGGACCTACACCTGCCA TATCCATCTGCAGGAACAGCAGCTCAATGCCACTGTCACATTGGCAATCATCACAGTGACTCCCAAATCCTTTGG GTCACCTGGATCCCTGGGGAAGCTGCTTTGTGAGGTGACTCCAGTATCTGGACAAGAACGCTTTGTGTGGAGGCTC TCTGGACACCCCATCCCAGAGGAGTTTCTCAGGACCTTGGCTGGAGGCACAGGAGGCCCAGCTCCTTTCCCAGCC TTGGCAATGCCAGCTGTACCAGGGGGAGAGGCTTCTTGGAGCAGCAGTGTACTTCACAGAGCTGTCTAGCCCAGG TGCCCAACGCTCTGGGAGAGCCCCAGGTGCCCTCCCAGCAGGCCACCTCCTGCTGTTTCTCACCCTTGGTGTCCT TTCTCTGCTCCTTTTGGTGACTGGAGCCTTTGGCTTTCACCTTTGGAGAAGACAGTGGCGACCAAGACGATTTTC TGCCTTAGAGCAAGGGATTCACCCTCCGCAGGCTCAGAGCAAGATAGAGGAGCTGGAGCAAGAACCGGAGCCGGA ATCTCAGCAGCCCAGTCCAAATAAACGTCCTGTCTAGCAGC

655/2682 FIGURE 599

MWEAQFLGLLFLQPLWVAPVKPLQPGAEVPVVWAQEGAPAQLPCSPTIPLQDLSLLRRAGVTWQHQPDSGPPAAA PGHPLAPGPHPAAPSSWGPRPRRYTVLSVGPGGLRSGRLPLQPRVQLDERGRQRGDFSLWLRPARRADAGEYRAA VHLRDRALSCRLRLRLGQASMTASPPGSLRASDWVILNCSFSRPDRPASVHWFRNRGQGRVPVRESPHHHLAESF LFLPQVSPMDSGPWGCILTYRDGFNVSIMYNLTVLGLEPPTPLTVYAGAGSRVGLPCRLPAGVGTRSFLTAKWTP PGGGPDLLVTGDNGDFTLRLEDVSQAQAGTYTCHIHLQEQQLNATVTLAIITVTPKSFGSPGSLGKLLCEVTPVS GQERFVWSSLDTPSQRSFSGPWLEAQEAQLLSQPWQCQLYQGERLLGAAVYFTELSSPGAQRSGRAPGALPAGHL LLFLTLGVLSLLLLVTGAFGFHLWRRQWRPRRFSALEQGIHPRQAQTQDRGAGARTGAGAGAGTGARARARAGAA LTWS

656/2682 FIGURE 600

GTTTTCAGGCTCTTGGCGGTGAAGGTCAGAGTGCAGACCTGAGACCACTGCTCACCGACTTCAGACTCCAGTTTA TCTGTGCCCCAGCTTCCTCACTTAGTCTCAGAAGACTTAGGCTGAGGCCTCAGAAGGAGATCTCCATCCTTTGTC AGTGGCAGCAACTGGACTCTGCCCAGAAGAACCTCTACAGGGATGTCATGCTTGAGAACTACAGCCACCTGGTGT CCGTGGGGTATCTAGTTGCGAAGCCTGATGTGATCTTCAGGTTGGGACCAGGTGGAGAGTCCTGGATGGCAGATG ACAAACTTCCTTGGCAAGCTGCATTCATAGGCAAGGAAACACTGAAGGATGAAAGCGGTCAAGAATCCAGAACAT GTAGAAAAAGCATTTATCTGAGCACAGAATTTGATTCTGTAAGGCAAAGACTCCCTAAATATTATTCGTGGGAAA GCATATTGGAAAGTATGCTTCCATTATAATCTTCATAAAGCTCAACCTGCAGAGAGATTTTTTGACCCTAATCAA CGAGGGAAAGCCCTCCACCAAAAGCAAGCCCTTAGAAAAAGTCAGAGAAGTCAAACTGGGGAGAAACTCTACAAA TGTACTGAATGTGGAAAAGTGTTTATCCAGAAAGCAAACTTAGTTGTACATCAAAGAACTCACACCGGAGAGAAA CCTTATGAATGCTGCGAATGTGCAAAAGCCTTCAGCCAGAAGTCAACCCTCATAGCACACCAGAGAACTCACACA GGGGAGAAGCCCTATGAATGCAGTGAATGTGGAAAAACCTTTATCCAGAAGTCAACTCTGATTAAACATAAGAAA ATTCATATGGAGAGACCCTATAAATGCAGTGTCTGTGAGAAAGCCTTCAGTAGGAAGTCAACTCTCATTAAAC ATCAGATAATTCATATGGGAGAAACCTTATGAATGTAATAAATGTGGGAAATCTTTTAGTGTTAAATCAACTCTC ATTGTATGTCACAGAACATAAATGCATAAGTTGCATGCTATTGTGAATAGTGTGATGAAATTTTGCACTGTCCTG CCAAACTGGAGTGCAGTGGCACAATCTTGGCTCACTGCAACCTCCGCCTCTTGGGTTCAACCGATTCTCCTGCCT CAACCTCCCAAATAGTTGGGATTACAGGCACATGCCACCATACGCAGCTAATTTGTATTTTTAGTAGAGACAGGG GGGATTACAGGCATGAGCCACTGCACCCGGCTTGAATCATCCTTTTGTCCAGTATTATATCCATGCTGTATATGC TACCCGCCCACTAGTCCCTTAGCTGTCTCAGTTGTCAGATTGACTGTCATGGGATTGCAGTGCTTGCATTAAAGC TACCCTTATTGTATAATGACCCCAAAGTGCAAGAGTAGTGATGTTGGCAATTTGCATACACCAAAAATAAGTTAT AAAGTGCTTCCTTAAAGTGAAATGGTTAAAGTTCTTGACTTAATAAAGAAAAAAATGTATGCTGAGGTTGTTAA GATTTACAGTAAGAATGAATCTTCTATCCAGAAATTGTGAAGGAGGAAAAAGAAACTTGTGCTAGTTTTGCTGTC ACATCTGAAACTGCAAAAGTTGTGGCCACAGTGCATCATAAGTGCTAAGACGAAAAAGACATTAAATTTGCGGAT GGAAGGCGTGAATAGAAATGGGTTCTGACAGCAATCAGGTTCGGTACTATTCACAGTTTCAGGCATCCGCTAGGG ATCTTGGAACATATCCCCCATGGATAAGGGAGGGGTACTGTACCTTGTCATATTGTGCATTAAAGAATTCATTGA GTGTAATCATGTAAGTCTAACACACATTTAAAAAGCTCTCAGATATCATTTCGCCTTCGGTTGATGTAAGAAAAT

657/2682 FIGURE 601

MAMSQESLTFKDVFVDFTLEEWQQLDSAQKNLYRDVMLENYSHLVSVGYLVAKPDVIFRLGPGGESWMADGGTPV RTCAEVWQVDEQIDHYKESQDKLPWQAAFIGKETLKDESGQESRTCRKSIYLSTEFDSVRQRLPKYYSWEKAFKT SFKLSWSKWKLCKKER

658/2682 FIGURE 602

AGATTCGCGGCCGCCGCGGTGCGCCCACCGGTCCCGCCGGGCGCCCGCGGGACGCCCCAGGGCCCTCTC CGCCGGGGGCTCGCCCCCCCCCTCTTCCAAATTTAACCATTACCTAAATCCGAAGGGAAATGAGCAAACCT $\verb|CTCGGATTGGGTGTCAAGGTCTCCTCCGGGCTGGGGCTGAGCAAGCCCTCGGAGTGACCGTGGGTGACAGCGGCT|\\$ GCTCACAGCTACCACCAGCCGCGCTCCCCAGGACCAGACTATTCCCTCCGTTTAGAGAATGTACCGGCGCCTAGC CGAGCAGACAGCACTTCAAATGCAGGCGGGGCGAAAGCGGAGCCCCGGGACCGTTTGTCCCCCGAATCGCAGCTG ACCGAAGCCCCAGACAGACCTCCGCATCCCCCAGACAGCTGCGAAGCAGCGTCTGCGAACGGAGCTCGGAGTTT GAGGACTTCTGGAGGCCCCGTCACCCTCCGCGTCTCCAGCCTCGGAGAAGTCAATGTGCCCATCGCTGGACGAA GCCCAGCCTTCCCCCTGCCTTTCAAACCGTACTCATGGAGCGGCCTGGCGGGTTCTGACCTGCGGCACCTGGTG GCAGGGGCCGGTGCCACCGCTGGCCCTGGCCTAGGGCTCTACGGCGACTTCGGGTCTGCGGCAGCCGGGCTGTAT GTCAAGGTGGAGTCGGAGCTGCTGTGCACCCGCCTGCTGCTGGGCGGCGCTCCTACAAGTGCATCAAGTGCACCAGC AAGGTGTTTTCCACGCCGCACGGGCTCGAGGTGCACGTGCGCAGGTCCCACAGCGGTACCAGACCCTTTGCCTGC GAGATGTGCGGCAAGACCTTCGGGCACGCGGTGAGCCTGGAGCACAAAGCCGTGCACTCGCAGGAACGGAAC TTTGACTGTAAGATCTGTGGGAAGAGCTTCAAGAGGTCATCCACACTGTCCACACACCTGCTTATCCACTCAGAC ACTCGGCCCTACCCCTGTCAGTACTGTGGCAAGAGGTTCCACCAGAAGTCAGACATGAAGAAACACACTTTCATC CACACTGGTGAGAAGCTTCACAAGTGCCAGGTGTGCGGCAAGGCATTCAGCCAGAGCTCCAACCTCATCACCCAC AGCCGCAAACACACGGCTTCAAGCCCTTCGGCTGCGACCTCTGTGGGAAGGGTTTCCAGAGGAAGGTGGACCTC $\tt CGAAGGCACCGGGAGACGCAGCATGGGCTCAAA{\color{red}{TGA}}GCACCCTGGCTGCCAAGCAGCAGCAGCTACACAACACTA$ CAGAGGGCAGCCTCCCTGCTTGCCACCACTCTGCTCCCTGCTTCCACTCCCTTCTGACTTTCCAGACCCCA GGTCCAGTCTGCAGATCCTACCAGGTTGCTCCTCCTTCGCCTTACCTCCTGGAGCTGCCAGAAGAAATGAGGTAC CTTTTCAAAGTGCAGCCGAGAGTGAGAACCAAGTGACTCCCTAGGCTTCGGACACAAATAGGCTCCTCTACACCT GAAGACAAAGGCAAAGTCAAATGGGGACCAGAATAAATCTTAGACCCCACAGTCCTTCCCATTTCCAGCCTTAAT CTACAGACAGGAATGCCCTTCAGGTTTCTTCCTTCCCCCTTCTTGACCTACCCCAGATATTTGTGTGGAAGAGGA TTTCCTTCTGGGGGGTCTGTTGACTCCTTTCTTTTGGGTGCTGCCTATAAATCTTGGAGGAATCATTTCTCCTCC TCAAAAACTGATTCAGAAACTGACTTGGGGAAGGAATTTAATACTTTGAAGTCATGAGATGCACCATCGAGGCTA CCCCCAAGAAGAAGCAGAAGAGAAGTTGGTAATGAGAGGGGATTAGAGGTCCTCCCTTCAGTAGGGCTGTGAAAA GATCACCGGCTACCAAGTACCAGGCACCATGTTAGGTATTGGGGAAGAGAGACTGAAGTCACAACCCCTGACTGC TCCTCAAAAGCTAACGGTTGCACCTCCAAGTGGCTGGGTCTGTTCTTACTCTTGGAGGGAATTCTGAGAAGACAG CACAGAATTGTAAACCTTCCCTTTTGACCCTTTTGGATTTTATCAGGTGTAAACAAAAAGCTGAACAGTTACTTC **AAAGATATGTGTGTATATTCAGTTTTTTATTGTTAAGCTGATATTTTAAAGATTTCTGAGCTAGCAGGCATGTGG** GAAGGAAGGCTCTGTCTTCAACTCTTTGACCCTCCATGTGTACCATAGAGGGGGGGAAAGGTGGTATTTTCACTTT TTAAGTTAATAAAGTATTAAGAGTAAAAAAAAAA

659/2682 FIGURE 603

MPRSFLVKSKKAHSYHQPRSPGPDYSLRLENVPAPSRADSTSNAGGAKAEPRDRLSPESQLTEAPDRASASPRQL RSSVCERSSEFEDFWRPPSPSASPASEKSMCPSLDEAQPFPLPFKPYSWSGLAGSDLRHLVQSYRPCGALERGAG LGLFCEPAPEPGHPAALYGPKRAAGGAGAGAPGNCIAGAGATAGPGLGLYGDFGSAAAGLYEKPTAAAGLLYPER GHRLHANKGAGVKVESELLCTRLLLGGGSYKCIKCSKVFSTPHGLEVHVRRSHSGTRPFACEMCGKTFGHAVSLE QHKAVHSQERSFDCKICGKSFKRSSTLSTHLLIHSDTRPYPCQYCGKRFHQKSDMKKHTFIHTGEKLHKCQVCGK AFSQSSNLITHSRKHTGFKPFGCDLCGKGFQRKVDLRRHRETQHGLK

660/2682 FIGURE 604

GGAGGAGGAGCAAGCGAGGGGGCTGGTTCCTGAGCTTCGCAATTCCTGTGTCGCCTTCTGGGCTCCCAGCCTGC CGGATTTGAATCTCTTTCTCTCCCTTCAGAATCTTATCTTGGCTTTGGATCTTAGAAGAGAATCACTAACCAGAG ACGAGACTCAGTGAGTGAGCAGGTGTTTTGGACAATGGACTGGTTGAGCCCATCCCTATTATAAAA**ATG**TCTCAG AGCAACCGGGAGCTGGTGGTTGACTTTCTCTCCTACAAGCTTTCCCAGAAAGGATACAGCTGGAGTCAGTTTAGT GATGTGGAAGAGACAGGACTGAGGCCCCAGAAGGGACTGAATCGGAGATGGAGACCCCCAGTGCCATCAATGGC AACCCATCCTGGCACCTGGCAGACAGCCCCGCGGTGAATGGAGCCACTGGCCACAGCAGCAGTTTGGATGCCCGG GCATTCAGTGACCTGACATCCCAGCTCCACATCACCCCAGGGACAGCATATCAGAGCTTTGAACAGGATACTTTT GTGGAACTCTATGGGAACAATGCAGCAGCCGAGAGCCGAAAGGGCCAGGAACGCTTCAACCGCTGGTTCCTGACG GGCATGACTGTGGCCGGCGTGGTTCTGCTGGGCTCACTCTTCAGTCGGAAATGACCAGACACTGACCATCCACTC TACCCTCCCACCCCTTCTCTGCTCCACCACATCCTCCGTCCAGCCGCCATTGCCACCAGGAGAACCACTACATG CAGCCCATGCCCACCTGCCCATCACAGGGTTGGGCCCAGATCTGGTCCCTTGCAGCTAGTTTTCTAGAATTTATC ACACTTCTGTGAGACCCCCACACCTCAGTTCCCTTGGCCTCAGAATTCACAAAATTTCCACAAAATCTGTCCAAA GGAGGCTGGCAGGTATGGAAGGGTTTGTGGCTGGGGGCAGGAGGGCCCTACCTGATTGGTGCAACCCTTACCCCT TAGCCTCCCTGAAAATGTTTTTCTGCCAGGGAGCTTGAAAGTTTTCAGAACCTCTTCCCCAGAAAGGAGACTAGA TTGCCTTTGTTTTGATGTTTGTGGCCTCAGAATTGATCATTTTCCCCCCACTCTCCCCACACTAACCTGGGTTCC CTTTCCTTCCATCCCTACCCCCTAAGAGCCATTTAGGGGCCACTTTTGACTAGGGATTCAGGCTGCTTGGGATAA AGATGCAAGGACCAGGACTCCCTCCTCACCTCTGGACTGGCTAGAGTCCTCACTCCCAGTCCAAATGTCCTCCAG AGGGTGGCCCTTGCAGTTCAGCACCACCCTAGTCCCTTCCCCTCGGCTCCCATGACCATACTGAGGGACCAA CTGGGCCCAAGACAGATGCCCCAGAGCTGTTTATGGCCTCAGCTGCCTCACTTCCTACAAGAGCAGCCTGTGGCA TCTTTGCCTTGGGCTGCTCCTCATGGTGGGTTCAGGGGACTCAGCCCTGAGGTGAAAGGGAGCTATCAGGAACAG GGGCTGACTAGAAGGGCCAGTCCTGCCTGGCCAGGCAGATCTGTGCCCCATGCCTGTCCAGCCTGGGCAGCCAGG CATCCCCAGGGGTCCCAGCCACCCGGGCTCTCTGCTGTACATATTTGAGACTAGTTTTTATTCCTTGTGAAGAT .GATATACTATTTTTGTTAAGCGTGTCTGTATTTATGTGTGAGGAGCTGCTGGCTTGCAGTGCGCGTGCACGTGGA GGCTCCTGAGGGGCATCTGCCCCTCCCCCAACCCCCACCCCACACTTGTTCCAGCTCTTTGAAATAGTCTGTGTG

661/2682 FIGURE 605

MSQSNRELVVDFLSYKLSQKGYSWSQFSDVEENRTEAPEGTESEMETPSAINGNPSWHLADSPAVNGATGHSSSL DAREVIPMAAVKQALREAGDEFELRYRRAFSDLTSQLHITPGTAYQSFEQVVNELFRDGVNWGRIVAFFSFGGAL CVESVDKEMQVLVSRIAAWMATYLNDHLEPWIQENGGWDTFVELYGNNAAAESRKGQERFNRWFLTGMTVAGVVL LGSLFSRK

662/2682 FIGURE 606

663/2682 FIGURE 607

MTKFSSFSLFFLIVGAYMTHVCFNMEIIGGKEVSPHSRPFMASIQYGGHHVCGGVLIDPQWVLTAAHCQYRFTKG QSPTVVLGAHSLSKNEASKQTLEIKKFIPFSRVTSDPQSNDIMLVKLQTAAKLNKHVKMLHIRSKTSLRSGTKCK VTGWGATDPDSLRPSDTLREVTVTVLSRKLCNSQSYYNGDPFITKDMVCAGDAKGQKDSCKGDSGGPLICKGVFH AIVSGGHECGVATKPGIYTLLTKKYQTWIKSNLVPPHTN

664/2682 FIGURE 608

 $\verb|CCGAGAGCCAGAGAGATG| TCGGATTTCGACAGTAACCCGTTTGCCGACCCGGATCTCAACAATCCCTTCAAGGAT|$ CCATCAGTTACACAAGTGACAAGAAATGTTCCACCAGGACTTGATGAATATAATCCATTCTCGGATTCTAGAACA CCTCCACCAGGCGGTGTGAAGATGCCTAATGTACCCAATACACAACCAGCAATAATGAAACCAACAGAGGAACAT CCAGCTTATACACAGATTGCAAAGGAACATGCATTGGCCCAAGCTGAACTTCTTAAGCGCCAGGAAGAACTAGAA AGAAAAGCCGCAGAATTAGATCGTCGGGAACGAGAAATGCAAAAACCTCAGTCAACATGGTAGAAAAAATAATTGG CCACCTCTTCCTAGCAATTTTCCTGTCGGACCTTGTTTCTATCAGGATTTTTCTGTAGACATTCCTGTAGAATTC CAAAAGACAGTAAAGCTTATGTACTACTTGTGGATGTTCCATGCAGTAACACTGTTTCTAAATATCTTCGGATGC TTGGCTTGGTTTTGTGTTGATTCTGCAAGAGCGGTTGATTTTGGATTGAGTATCCTGTGGTTCTTGCTTTTTACT CCTTGTTCATTTGTCTGTTGGTACAGACCACTTTATGGAGCTTTCAGGAGTGACAGTTCATTTAGATTCTTTGTA TTCTTCTTCGTCTATATTTGTCAGTTTGCTGTACATGTACTCCAAGCTGCAGGATTTCATAACTGGGGCAATTGT GGTTGGATTTCATCCCTTACTGGTCTCAACCAÁAATATTCCTGTTGGAATCATGATGATAATCATAGCAGCACTT TTCACAGCATCAGCAGTCATCTCACTAGTTATGTTCAAAAAAGTACATGGACTATATCGCACAACAGGTGCTAGT TTTGAGAAGGCCCAACAGGAGTTTGCAACAGGTGTGATGTCCAACAAAACTGTCCAGACCGCAGCTGCAAATGCA GCTTCAACTGCAGCATCTAGTGCAGCTCAGAATGCTTTCAAGGGTAACCAGATT<u>TAA</u>GAATCTTCAAACAATACA CTGTTACCTTTTGACTGTACCTTTTTCTCCAGTTACTGTATTCTACAAATATTTTTATGTTCAAAACACACAGTA CAGACAGCATGGATATTTCCTGTTCACTTGTGCATGGGCTAAAACCAGGAAAACTTCCTTGTCTTATTACTTTAC GGGGGATGACATTCAGTGAATTATTTCAGTGGTGACCCACTGAAAATTAATAATGGTACTTATGATTAAAAACGC ATTTAATACTAACTGCAGTAGTTCTTTCAAGAATCTTTAGAGATAAGGATTGCACATTGGAAAAGTAAACCATGT TTAGCTGTTTCAGTCACCAGTGAAGAGCCTATGTGCATTTTGTAGTAGATAATGTAAAATTTGTCATCTTTTTCT TTTCTTTTTTTTTTTTGATAGCTGATATTTTGATAACAATCTCTAATTTTGCATGGGCCACCACATTTCTTATATTAAA AGAATTAGTGTTTTGGCTTCTGTACTGCTTATGGTTGTAGGATTCAGGGGTTAATGGAATCACAGAAATGATATT CTGCAAGAATTTCTTTTAAATAAAAAGTTTGGGGGTGCAATATAAGAAGTTTATATAATATGCAGTACATTATCC AAAAGAGAAGGTAGTTAATGCAGTAGAAAGTAGTGGTAATAATTCCTTTTT

665/2682 FIGURE 609

MSDFDSNPFADPDLNNPFKDPSVTQVTRNVPPGLDEYNPFSDSRTPPPGGVKMPNVPNTQPAIMKPTEEHPAYTQ IAKEHALAQAELLKRQEELERKAAELDRREREMQNLSQHGRKNNWPPLPSNFPVGPCFYQDFSVDIPVEFQKTVK LMYYLWMFHAVTLFLNIFGCLAWFCVDSARAVDFGLSILWFLLFTPCSFVCWYRPLYGAFRSDSSFRFFVFFFVY ICQFAVHVLQAAGFHNWGNCGWISSLTGLNQNIPVGIMMIIIAALFTASAVISLVMFKKVHGLYRTTGASFEKAQ QEFATGVMSNKTVQTAAANAASTAASSAAQNAFKGNQI

666/2682 FIGURE 610

GGGAGGCGTGAGCCACCGCGCCTGTCCAGGAATCAGTTTTTTCCAACAAGTTTTTTGGACTCCACTTTGAGAAATC CTGACCTGCACTATGCCTGAAACACTCCAAAGGGGGTGCTGATCTGGAGACAGATCTGTCCTGGGACCTGTTTCA ${\tt CAGCCCTGCAAGGTTTGGGACTCTGTCCACAGGTCCAGACCCAGTACTTATTATGAACTGTTGGGGGTGCATCC}$ TGGTGCCAGCACTGAGGAAGTTAAACGAGCTTTCTTCTCCAAGTCCAAAGAGGTACCCGTACCCCTGAGGTGGGG CCACATTTTTTCAGCCCTCATAGGGAGTGCAGGTGCTCAATGGTAGGGGAAAGGCTGTGGGCAGGAGCCAGGGG TGAATGCAGGGGGCTGGCAGGTGGGGAGGGCTTGAACACAGGAGGAAGCAGGAGTCCATGCTCTCTGGCCTTCTG TGTCATCAGCATCGGGTCCTGGGGAGGGACAGGCAAAGGGAGATAAGGGGAGTCCTGCCCCACCCCAGCTGCACCC AGACCGGGACCCTGGGAACCCAAGCCTGCACAGCCGCTTTGTGGAGCTGAGCGAGGCATACCGTGTGCTCAGCCG TGAGCAGAGCCGCCGCAGCTATGATGACCAGCTCCGCTCAGGTAGTCCCCCAAAGTCTCCACGAACCACAGTCCA TGACAAGTCTGCCCACCAAACACAGCTCCTGGACACCCCCAACGCACAGTACTGGTCCCAGTTTCACAGCGT $\mathtt{CATGCTGGCGGGCATGGGCCTGCACTACATTGCCTTCAGG} \underline{\mathbf{TGA}} \mathtt{TGCCTGTTCTCCCCGGGGTGATGGGCAAAGGG}$ CAGGAGGGTGGGTGAATTCCAGTGTGGTCAGCCAGTCCTCCACAGCACCTCGTGGCCCGTACTCTTGTGTCTCTC AAAAA

667/2682 FIGURE 611

 ${\tt MGPGEGQAKGDKGSPAPPQLHPDRDPGNPSLHSRFVELSEAYRVLSREQSRRSYDDQLRSGSPPKSPRTTVHDKSAHQTHSSWTPPNAQYWSQFHSVRPQGPQLRQQQHKQNKQVLGYCLLLMLAGMGLHYIAFR}$

668/2682 FIGURE 612

669/2682 FIGURE 613

MEQGKGLAVLILATILLQGTLAQSIKGNHLVKVYDYQEDGSVLLTCDAEAKNITWFKDGKMIGFLTEDKKKWNLG SNAKDPRGMYQCKGSQNKSKPLQVYYRMCQNCIELNAATISGFLFAEIVSIFVLAVGVYFIAGQDGVRQSRASDK QTLLPNDQLYQPLKDREDDQYSHLQGNQLRRN

670/2682 FIGURE 614

GATTTCAGTTGAAAGATGTGTTTTTTGTGAGTAGAGCACCGCAGAAGAACTGAAGACTGTTGTGTGCCTCCCCGCAG AAGGGGCTACCATGATCCTTTCCTCCTATAACACCATCCAGTCGGTTTTCTGTTGCTGCTGTTGCTGCTGTTCAGTGĆ AGAAGCGACAAATGAGAACACAGATAAGCCTGAGCACAGATGAAGAGCTTCCAGAAAAATACACCCAGCATCGCA GGCCGTGGCTCAGCCAATTGTCAAATAAGAAGCAATCCAACACGGGCCGTGTGCAGCCGTCAAAACGAAAGCCAC TGCCTCCCTCCCACCTCTGAGGTTGCTGAAGAGAGATCCAAGTCAAGGCACTTTATGATTTTCTGCCCAGAG AACCCTGTAATTTAGCCTTAAGGAGAGCAGAAGAATACCTGATACTGGAGAAATACAATCCTCACTGGTGGAAGG CAAGAGACCGTTTGGGGAATGAAGGCTTAATCCCAAGCAACTATGTGACTGAAAACAAAATAACTAATTTAGAAA TATATGAGTGGTACCATAGAAACATTACCAGAAATCAGGCAGAACATCTATTGAGACAAGAGTCTAAAGAAGGTG CATTTATTGTCAGAGATTCAAGACATTTAGGATCCTACACAATTTCCGTATTTATGGGAGCTAGAAGAAGTACGG AGGCTGCCATAAAACATTATCAGATAAAAAAGAATGACTCAGGACAGTGGTATGTGGCTGAAAGACACGCCTTTC AATCAATCCCTGAGTTAATCTGGTATCACCAGCACAATGCAGCCGGTCTCATGACTCGTCTCCGATATCCAGTTG CTTTTATAAAGGAGATTGGAAGCGGTCAGTTTGGAGTGGTCCATTTAGGTGAATGGCGGTCACATATCCAGGTAG CTATCAAGGCCATCAATGAAGGCTCCATGTCTGAAGAGGGTTTCATTGAAGAGGCCAAAGTGATGATGAAATTAT CTCATTCAAAGCTAGTGCAACTTTATGGAGTCTGTATACAGCGGAAGCCCCTTTACATTGTGACAGAGTTCATGG AGGATATATGTGAAGGAATGGAATATCTGGAGAGGAATGGCTATATTCATAGGGATTTGGCGGCAAGGAATTGTT TGGTCAGTTCAACATGCATAGTAAAAATTTCAGACTTTGGAATGACAAGGTACGTTTTGGATGATGAGTATGTCA GTTCTTTTGGAGCCAAGTTCCCAATCAAGTGGTCCCCTCCTGAAGTTTTTCTTTTCAATAAGTACAGCAGTAAAT CTGATGTCTGGTCATTTGGAGTTTTAATGTGGGAAGTTTTTACAGAAGGAAAAATGCCTTTTGAAAATAAGTCAA ATTTGCAAGTCGTGGAAGCTATTTCTGAAGGCTTCAGGCTATATCGCCCTCACCTGGCACCAATGTCCATATATG AAGTCATGTACAGCTGCTGGCATGAGAAACCTGAAGGCCGCCCTACATTTGCGGAGCTGCTGCGGGCTGTCACAG AGATTGCGGAAACCTGGTGACCGGAAACAGAATGCCAACCCAAAGAGTCATCTTGCAAAACTGTCATTTATTGTG GATCACAGTTTTTAAAAGTTTTAAAAATTTAAGAATATTCACACAATCGTTTTTCTATGTGTGAGAGGGATTTGC ACACTCTTATTTTTCTGTAAAATATTTCACATCCCAAATGTGAAGAAGTGAAAAAGACTTCGCAGCAGTCTTCAT AAGGGGACTCCCTTGAAGAATTTCATGTTTTTTGGGCTGTATAGCTCTTTACAGAAAATGCACCTTTATAAATCAC **ATGAATGTTAGTATTCTGGAAATGTCTTTTGTTAATATATCTTCCCATGTTATTTAACAAATTGTTTTTTGCACA** TATCTGATTATATTGAAAGCAGTTTTTTTGCATTCGAGTTTTAAACACTGTTATAAAATGTAGCCAAAGCTCACC TTTGAACAGATCCCGGTGACATTCTATTTCCAGGAAAATCCGGAACCTGATTTTAGTTCTGTGATTTTACACTTT TTACATGTGAGATTGGACAGTTTCAGAGGCCTTATTTTGTCATACTAAGTGTCTCCTGTAATTTTCAGGAAGATG ATTTGTTCTTTCCAGAAGAGGAGACAAAAGCAAGATAGCCAAATGTGACATCAAGCTCCATTGTTTCGGAAATCC **AGGATTTTGAATTC**

671/2682 FIGURE 615

MILSSYNTIQSVFCCCCCCSVQKRQMRTQISLSTDEELPEKYTQHRRPWLSQLSNKKQSNTGRVQPSKRKPLPPL
PPSEVAEEKIQVKALYDFLPREPCNLALRRAEEYLILEKYNPHWWKARDRLGNEGLIPSNYVTENKITNLEIYEW
YHRNITRNQAEHLLRQESKEGAFIVRDSRHLGSYTISVFMGARRSTEAAIKHYQIKKNDSGQWYVAERHAFQSIP
ELIWYHQHNAAGLMTRLRYPVGLMGSCLPATAGFSYEKWEIDPSELAFIKEIGSGQFGVVHLGEWRSHIQVAIKA
INEGSMSEEDFIEEAKVMMKLSHSKLVQLYGVCIQRKPLYIVTEFMENGCLLNYLRENKGKLRKEMLLSVCQDIC
EGMEYLERNGYIHRDLAARNCLVSSTCIVKISDFGMTRYVLDDEYVSSFGAKFPIKWSPPEVFLFNKYSSKSDVW
SFGVLMWEVFTEGKMPFENKSNLQVVEAISEGFRLYRPHLAPMSIYEVMYSCWHEKPEGRPTFAELLRAVTEIAE
TW

672/2682 FIGURE 616

ATCTGGTGGAGAGTTCTCAGCTTGCTGGCATGGTTCCCCTTGCAAGAGGCCTCTCTGACTAACCACACAGAAACC $\verb|CTGACCCCTCAGGGTTCACCATTTTTTTAAATGAGTATCCTGCTTTAAAAAAATTCCAAATACCAGCTTCTTCAT|\\$ CACTCGGCCAATCAGCTCTCCATCACTGTGCCTAACGTAACCCTGCAAGATGAAGGCGTGTACAAGTGCTTACAT TACAGCGACTCTGTAAGCACAAAGGAAGTGAAAGTGATTGTGCTGGCAACTCCTTTCAAGCCAATCCTGGAAGCT CAGATAACCTGGCTACTTGGGAATAGCATGGAAGTGTCCGGTGGAACGCTCCATGAATTTGAAACTGATGGGAAG AAATGTAATACTACCAGCACTCTCATAATCCACACTTATGGCAAAAATTCAACGGTGGACTGCATTATCCGACAC AGAGGCCTGCAAGGGAGAAAACTAGTAGCACCCTTCCGGTTTGAAGATTTGGTTACTGATGAAGAGACAGCTTCA TCTAGTACATCGGAGATTGACAAGGAAGAGAAAGAACCACTCAAGATCCTGACTTGACCACCGAAGCAAAT CTCTTCATCATAGTCCAGCTCTTCATCATGAAGCTGAGGAAAGCACATGTGATATGGAAGAGAAAAACGAAGTT TCAGAACACACACTAGAAAGTTACAGATCAAGGTCAAATAATGAAGAAACATCATCTGAAGAGAAAAATGGCCAA GTACAACATTCAAAATTAGAAGAAAAGCACATCCAAGTACCAGAGAGTATTGTGTAGTGCTCTCTGCAATGGAAC ATGTGATTTCAGGGTTGCCGCAGTGTCACCTCAGTGGACCAGCCTGGGGGAAGGAGCTTAATTGCTGAGACATTA ATAATGACCTCTTAGTGCAATGCAAGATGGTGTCCTCGGATAATGATCTGCCCCGGAGCTAGGGCAGCAACATGA GGACCAAACCATGCACATAAAGCTTGTAGTTTAAAAAAGAAAAGCAAAAAAATAATTATGCCTGACACTACTTCA GAGCAGGAGGATTCTACGAAGCCTTGGGGATCAGGGTCAGTGTGAGCAGCTAACATCCTACCTCAAATGGAACAG AAATAAAGAAATTTGGGATGCAAAGTACCTAAAGATCTCTGATCCTAAGAAGTTACTTCTGGCCAGGCGGGTGG $\tt CTCATGCCTGTAATCCTAGCACTTTGGGAGGCTGAGGTAGGCAGATCACTTGAGGTCAGGAGTTGGAGACCAGCC$ TGGCCAACATAGTGAAACCCCGTCTCTACTAAAAATGCAAAAATTAGCCAGGCGTAGTGGTGCGCACCTGTAGTC TCAGATACTTGGGAGGCTGAGGGTGGAGAATCGCTTGAACCTGGGAGGTGGAGATTGCAGTGAGTCAAGATCTCA TAACATGTAACCAGCACAAAGCAATGTCAGGGAGGAGTGATACATGACAATAAATGAGTCAGATGAGCAAGAAGG CCCCAGAACCCATGCCCCAAGGCACAAAGAGGAGCTCAGGGTAGGCCCAAAGATTCGAATTCCTTAGATTACTAA ATCACATGAGCGGACCTTGTCTGTCAGATAAGATTTTTACCTGGAAAATTCCATGACCAATACATGTGCAAAAGAA TGTTTGTTTTCTAGTGGTTATACCAAGCTATACTTCCTGTTTTCACGTGTGAAAGTAACATGGGACATGCCTTT CTTTTCCGATCAGTTTATTTAAGCTATACAGCAAACTTTGGCATTTATGTGGAGCATTTCTCATTGTTGGAATCT GAATAAACCAATTACAAAATAAAAA

673/2682 FIGURE 617

MWWRVLSLLAWFPLQEASLTNHTETITVEEGQTLTLKCVTSLRKNSSLQWLTPSGFTIFLNEYPALKNSKYQLLH HSANQLSITVPNVTLQDEGVYKCLHYSDSVSTKEVKVIVLATPFKPILEASVIRKQNGEEHVVLMCSTMRSKPPP QITWLLGNSMEVSGGTLHEFETDGKKCNTTSTLIIHTYGKNSTVDCIIRHRGLQGRKLVAPFRFEDLVTDEETAS DALERNSLSSQDPQQPTSTVSVTEDSSTSEIDKEEKEQTTQDPDLTTEANPQYLGLARKKSGILLLTLVSFLIFI LFIIVQLFIMKLRKAHVIWKRENEVSEHTLESYRSRSNNEETSSEEKNGQSSHPMRCMNYITKLYSEAKTKRKEN VQHSKLEEKHIQVPESIV

674/2682 FIGURE 618

ATAAAGAATATCAACACCTTTGAGAACAGAATGTTAATGCTTGATGGGATGCCGGCAGTCAGAGTCAAAACAGAG CTTTTGGAATCTGAACAAGGGTCTCCAAACGTCCACAACTATCCCGATATGGAAGCCGTTCCCCTGTTGCTAAAT AATGTGAAAGGGGAGCCCCCGGAGGACTCGTTATCTGTAGATCACTTCCAAACACAAACTGAGCCAGTGGACTTG TCAATAACAAAGCCAGGACGTCCCCTACTGCCGTTTCATCCTCCCCAGTTTCCATGACAGCATCTGCCTCCTCA CCTTCTTCAACCTCTTCATCGTCTTCTAGTCGTCTAGCCTCATCCCCAACTGTTATCACATCAGTATCT TCAGCGTCATCTTCGTCAACAGTATTAACTCCAGGGCCCCTTGTGGCCTCTGCATCTGGTGTTGGAGGCCAGCAG TTTTTGCACATTATCCATCCCGTACCGCCTTCAAGTCCCATGAATTTACAGTCTAACAAACTGAGTCATGTTCAC CGCATCCCCGTGGTGGTACAGTCGGTGCCTGTTGTCTACACAGCTGTAAGGTCACCTGGAAATGTGAACAACACT ATTGTCGTGCCGCTTTTGGAGGATGGGAGAGGCCATGGCAAAGCACAAATGGACCCCCGAGGCCTATCTCCCAGA CAAAGTAAAAGTGACAGTGATGATGATGACCTGCCAAATGTGACCTTAGATAGCGTTAATGAAACTGGATCTACG GCCCTTTCCATAGCCAGAGCAGTACAAGAGTAAGTATCACATTCACAGGATGAATTAAGAATTGCCAAGGTGTTC AATGGATAATGGAAACTGCAGCATCTCCTGTCCCCCAGCCATGTCATTCTAGCTGTGAACTGGCACGAATGTCAG CAGCTTTTCATTCAGCTGAATGCTCTTTGGGAGATTAGGGCAGAGAATGGAGTGTTTTAATGAGTTGGAAATTCA TGCTTTGATGAGATATAAGACCTATGTGCATCTTTTCTAATACCTCCTGCACCCTTCTCCTGAACTCTGCAAAAA **AAAAAAATTGTTATTTTGAATGTCACTATTTGATTATCATCATCATTATTATTACACAAAGTCAAGGGAAATA** TGGCAAAGTATTGTTATCTTGTTTTGATAGGAAATTACAGAATAGCTTTTTGGAAGATTTAAATTTTGGAAAATAA TATGTTCATCCTTTGAAAAGTAGTACTCATATGTTATTTTTAAATGAATCTTTTCTCTGTCCTTTTACCTGGACC GCAGGGTTAGATTTCAGCCCTCGTTTATTGAAAATAGCTGCTTTTCTATCAGTCAACCTTGTACCTAGAATTGAA CCTAAATGATTGAAAAAAAAAA

675/2682 FIGURE 619

MNIHMKRKTIKNINTFENRMLMLDGMPAVRVKTELLESEQGSPNVHNYPDMEAVPLLLNNVKGEPPEDSLSVDHF QTQTEPVDLSINKARTSPTAVSSSPVSMTASASSPSSTSTSSSSSSRLASSPTVITSVSSASSSSTVLTPGPLVA SASGVGGQQFLHIIHPVPPSSPMNLQSNKLSHVHRIPVVVQSVPVVYTAVRSPGNVNNTIVVPLLEDGRGHGKAQ MDPRGLSPRQSKSDSDDDDLPNVTLDSVNETGSTALSIARAVQEVHPSPVSRVRGNRMNNQKFPCSISPFSIEST RRQRRSESPDSRKRRIHRCDFEGCNKVYTKSSHLKAHRRTHTGEKPYKCTWEGCTWKFARSDELTRHYRKHTGVK PFKCADCDRSFSRSDHLALHRRRHMLV

676/2682 FIGURE 620

GCCCCATCTCCTTGGGCTGCCCGTGCTTCGTGCTTTGGACTACCGCCCAGCAGTGTCCTGCCCTCTGCCTGGGCC ${\tt TCGGTCCCTGCACCTGCTGCCTGGATCCCCGGCCTGGCCTGGGCCTTGGTTCTCCCC} \underline{{\tt ATG}}{\tt ACACCAC}$ CTGAACGTCTCTCCCCAAGGGTGTGTGGCACCACCCTACACCTCCTCCTTCTGGGGCTGCTGCTGGTTCTGC TGCCTGGGGCCCAGGGGCTCCCTGGTGTTGGCCTCACACCTTCAGCTGCCCAGACTGCCCGTCAGCACCCCAAGA GGAGAGCAAACACGGACCGTGCCTTCCTCCAGGATGGTTTCTCCTTGAGCAACAATTCTCTCCTGGTCCCCACCA GTGGCATCTACTTCGTCTACTCCCAGGTGGTCTTCTCTGGGAAAGCCTACTCTCCCAAGGCCACCTCCTCCCCAC TCTACCTGGCCCATGAGGTCCAGCTCTTCTCCTCCCAGTACCCCTTCCATGTGCCTCTCCTCAGCTCCCAGAAGA TGGTGTATCCAGGGCTGCAGGAACCCTGGCTGCACTCGATGTACCACGGGGCTGCGTTCCAGCTCACCCAGGGAG ${\tt ACCAGCTATCCACCCACACAGATGGCATCCCCCACCTAGTCCTCAGCCCTAGTACTGTCTTCTTTGGAGCCTTCG}$ CTCTGTAGAACTTGGAAAAATCCAGAAAGAAAAAATAATTGATTTCAAGACCTTCTCCCCATTCTGCCTCCATTC TGACCATTTCAGGGGTCGTCACCACCTCTCCTTTGGCCATTCCAACAGCTCAAGTCTTCCCTGATCAAGTCACCG GAGGATTTCAAGCCTGCCTAGGAATTCCCAGCCCAAAGCTGTTGGTCTGTCCCACCAGCTAGGTGGGGCCTAGAT GATCACAGGGCCCCAGAAGGCAGGGAAAGGCTCTGAAAGCCAGCTGCCGACCAGAGCCCCACACGGAGGCATCTG CACCCTCGATGAAGCCCAATAAACCTCTTTTCTCTG

677/2682 FIGURE 621

 $\label{thm:cottlhllightvlpgaqglpgvgltpsaqqtarqhpkmhlahstlkpaahligdpskqn sllwrantdraflqdgfslsnnsllvptsgiyfvysqvvfsgkayspkatssplylahevqlfssqypfhvplls sqkmvypglqepwlhsmyhgaafqltqgdqlsthtdgiphlvlspstvffgafal$

678/2682 FIGURE 622

GTTCAGCGCCGGCGCGGTGTGCGAGCCGCGGCAGAGTGAGGCAACCCGAGGTGCGGAGCGACCTGCGGAG AGGCCGCGGCTGTCTGTGTGTCCTTCTGAGTGTCAGAGGAACGGCCAGACCCCGCGGGCCGGAGCAGAACGCGGC CAGGGCAGAAGCGGCGGCAGGAGAAGCAGGCAGGGCGGAGGCCGAGACCCGAGACCCGAGGCGGAGGCGGA ${\tt CCGCGAGCCGGCC}$ AACAATCGGAGTTGCAGCCAAAAATCAGCAAATCACTCATGCAAACAATACGGTGTCTAACTTCAAAAGATTTCA TGGCCGAGCATTCAACGACCCCTTCATTCAAAAGGAGAAGGAAAACTTGAGTTACGATTTGGTTCCATTGAAAAA TGGTGGAGTTGGAATAAAGGTAATGTACATGGGTGAAGAACATCTATTTAGTGTGGAGCAGATAACAGCCATGTT GTTGACTAAGCTGAAGGAAACTGCTGAAAACAGCCTCAAGAAACCAGTAACAGATTGTGTTATTTCAGTCCCCTC CTTCTTTACAGATGCTGAGAGGCGATCTGTGTTAGATGCTGCACAGATTGTTGGCCTAAACTGTTTAAGACTTAT GAATGACATGACAGCTGTTGCTTTGAATTACGGAATTTATAAGCAGGATCTCCCAAGCCTGGATGAGAAACCTCG GATAGTGGTTTTTGTTGATATGGGACATTCAGCTTTTCAAGTGTCTGCTTGTGCTTTTAACAAGGGAAAATTGAA GGTACTGGGAACAGCTTTTGATCCTTTCTTAGGAGGAAAAAACTTCGATGAAAAGTTAGTGGAACATTTCTGTGC AGAATTTAAAACTAAGTACAAGTTGGATGCAAAATCCAAAATACGAGCACTCCTACGTCTGTATCAGGAATGTGA TGTTTCCGGAAAGATGAACAGGTCACAATTTGAAGAACTCTGTGCTGAACTTCTGCAAAAGATAGAAGTACCCCT TTATTCACTGTTGGAACAAACTCATCTCAAAGTAGAAGATGTGAGTGCAGTTGAGATTGTTGGAGGCGCTACACG AATTCCAGCTGTGAAGGAAAGAATTGCCAAATTCTTTGGAAAAGATATTAGCACAACACTCAATGCAGATGAAGC AGTAGCCAGAGGATGTGCATTACAGTGTGCAATACTTTCCCCGGCATTTAAAGTTAGAGAATTTTCCGTCACAGA TGCAGTTCCTTTTCCAATATCTCTGATCTGGAACCATGATTCAGAAGATACTGAAGGTGTTCATGAAGTCTTTAG TCGAAACCATGCTGCTCCTTTCTCCAAAGTTCTCACCTTTCTGAGAAGGGGGCCTTTTGAGCTAGAAGCTTTCTA TTCTGATCCCCAAGGAGTTCCATATCCAGAAGCAAAAATAGGCCGCTTTGTAGTTCAGAATGTTTCTGCACAGAA <u>AGATGGAGAAAATCTAGAGTAAAAGTCAAAGTGCGAGTCAACACCCATGGCATTTTCACCATCTCTACGGCATC</u> TATGGTGGAGAAAGTCCCAACTGAGGAGAATGAAATGTCTTCTGAAGCTGACATGGAGTGTCTGAATCAGAGACC ACCAGAAAACCCAGACACTGATGCAAATGAAAAAAAGTTGACCAGCCTCCAGAAGCTAAAAAAGCCCAAAATAAA GGTGGTGAATGTTGAGCTGCCTATTGAAGCCAACTTGGTCTGGCAGTTAGGGAAAGACCTTCTTAACATGTATAT TGAGACAGAGGGTAAGATGATAATGCAAGATAAATTGGAAAAAGGAAAGGAATGATGCTAAAAATGCAGTTGAGGA ATATGTGTATGAGTTCAGAGACAAGCTGTGTGGACCATATGAAAAATTTATATGTGAGCAGGATCATCAAAATTT TTTGAGACTCCTCACAGAAACTGAAGACTGGCTGTATGAAGAAGGAGGAGCAAGCTAAACAAGCATATGTTGA CAAGTTGGAAGAATTAATGAAAATTGGCACTCCAGTTAAAGTTCGGTTTCAGGAAGCTGAAGAACGGCCAAAAAT GTTTGAAGAACTAGGACAGAGGCTGCAGCATTATGCCAAGATAGCAGCTGACTTCAGAAATAAGGATGAGAAATA CAACCATATTGATGAGTCTGAAATGAAAAAAGTGGAGAAGTCTGTTAATGAAGTGATGGAATGGAATAATGT CATGAATGCTCAGGCTAAAAAGAGTCTTGATCAGGATCCAGTTGTACGTGCTCAGGAAATTAAAACAAAAATCAA GGAATTGAACAACACATGTGAACCCGTTGTAACACAACCGAAACCAAAAATTGAATCACCCAAACTGGAAAGAAC TCCAAATGGCCCAAATATTGATAAAAAGGAAGAAGATTTAGAAGACAAAAACAATTTTGGTGCTGAACCTCCACA TCAGAATGGTGAATGTTACCCTAATGAGAAAAATTCTGTTAATATGGACTTGGAC<u>TAG</u>ATAACCTTAAATTGGCC TATTCCTTCAATTAATAAAATATTTTTGCCATAGTATGTGACTCTACATAACATACTGAAACTATTTATATTTTC CCTAAAAGGGAAAATTGCCTTGGTAACTTTCAGATTCCTGTGGAATTGTGAATTCATACTAAGCTTTCTGTGCAG TCTCACCATTTGCATCACTGAGGATGAAACTGACTTTTGTCTTTTTGGAGAAAAAAACTGTACTGTTCTAAGA GGGCTGTGATTAAAATCTTTAAGCATTTGTTCCTGCCAAGGTAGTTTTCTTGCATTTTGCTCTCCATTCAGCATG TGTGTGGGTGTGGATGTTTATAAACAAGACTAAGTCTGACTTCATAAGGGCTTTCTAAAACCATTTCTGTCCAAG AGAAAATGACTTTTTGCTTTGATATTAAAAATTCAATGAGTAAAACAAAAGCTAGTCAAATGTGTTAGCAGCATG CAGAACAAAACTTTAAACTTTCTCTCTCACTATACAGTATATTGTCAATGTGAAAGTGTGGAATGGAAGAAATG TCGATCCTGTTGTAACTGATTGTGAACACTTTTATGAGCTTTAAAATAAAGTTCATCTTATGGTGTCATTTCT

679/2682 FIGURE 623

MSVVGLDVGSQSCYIAVARAGGIETIANEFSDRCTPSVISFGSKNRTIGVAAKNQQITHANNTVSNFKRFHGRAF
NDPFIQKEKENLSYDLVPLKNGGVGIKVMYMGEEHLFSVEQITAMLLTKLKETAENSLKKPVTDCVISVPSFFTD
AERRSVLDAAQIVGLNCLRLMNDMTAVALNYGIYKQDLPSLDEKPRIVVFVDMGHSAFQVSACAFNKGKLKVLGT
AFDPFLGGKNFDEKLVEHFCAEFKTKYKLDAKSKIRALLRLYQECEKLKKLMSSNSTDLPLNIECFMNDKDVSGK
MNRSQFEELCAELLQKIEVPLYSLLEQTHLKVEDVSAVEIVGGATRIPAVKERIAKFFGKDISTTLNADEAVARG
CALQCAILSPAFKVREFSVTDAVPFPISLIWNHDSEDTEGVHEVFSRNHAAPFSKVLTFLRRGPFELEAFYSDPQ
GVPYPEAKIGRFVVQNVSAQKDGEKSRVKVKVRVNTHGIFTISTASMVEKVPTEENEMSSEADMECLNQRPPENP
DTDANEKKVDQPPEAKKPKIKVVNVELPIEANLVWQLGKDLLNMYIETEGKMIMQDKLEKERNDAKNAVEEYVYE
FRDKLCGPYEKFICEQDHQNFLRLLTETEDWLYEEGEDQAKQAYVDKLEELMKIGTPVKVRFQEAEERPKMFEEL
GQRLQHYAKIAADFRNKDEKYNHIDESEMKKVEKSVNEVMEWMNNVMNAQAKKSLDQDPVVRAQEIKTKIKELNN
TCEPVVTQPKPKIESPKLERTPNGPNIDKKEEDLEDKNNFGAEPPHQNGECYPNEKNSVNMDLD

680/2682 FIGURE 624A

TGCAGAGAACAGAGAAAGGACATCTGCGAGGAAAGTTCCCTGATGGCTGTCAACAAAGTGCCACGTCTCTATGGC TGTGTACGCTGAGCACACGATTTTATCGCGCCTATCATATCTTGGTGCATAAACGCACCTCACCTCGGTCAACCC TTGCTCCGTCTTATGAGACAGGCTTTATTATCCGCATTTTATATGAGGGGAATCTGACGGTGGAGAGAATTAT CTTGCTCAAGGCGACACAGCAGAGCCCACAGGTGGCAGAATCCCACCCGAGCCCGCTTCGACCCGCGGGGTGGAA ACCACGGGCGCCCGCCCGCCTGCGCTTCCAGAGCTGAACTGAGAAGCGAGTCCTCTCCGCCCTGCGGCCACCGCC CAGCCCCGACCCCCGCCCCGGCCCGATCCTCACTCGCCGCCAGCTCCCCGCGCCCACCCCGGAGTTGGTGGCGCA GCGACACGTGCGGCCCAGAGCACCGGGGCCACCCGGTCCCCGCAGGCCCGGGACCGCCCCCCTGGCAGGCGACA CGTGGAAGAATACGGAGTTCTATACCAGAGTTGATTGTTGATGCCACATACTTTTAGAGGATGCTCATTGGCATT TATGTTTATAATCACGTGGCTGTTGATTAAAGCAAAAATAGATGCGTGCAAGAGAGGCGATGTGACTGTGAAGCC TTCCCATGTAATTTTACTTGGATCCACTGTCAATATTACATGCTCTTTGAAGCCCAGACAAGGCTGCTTTCACTA TTCCAGACGTAACAAGTTAATCCTGTACAAGTTTGACAGAAGAATCAATTTTCACCATGGCCACTCCCTCAATTC TCAAGTCACAGGTCTTCCCCTTGGTACAACCTTGTTTGTCTGCAAACTGGCCTGTATCAATAGTGATGAAATTCA AATATGTGGAGCAGAGATCTTCGTTGGTGTTGCTCCAGAACAGCCTCAAAATTTATCCTGCATACAGAAGGGAGA ACAGGGGACTGTGGCCTGCACCTGGGAAAGAGGACGACACCCACTTATACACTGAGTATACTCTACAGCTAAG TGGACCAAAAAATTTAACCTGGCAGAAGCAATGTAAAGACATTTATTGTGACTATTTGGACTTTGGAATCAACCT CACCCCTGAATCACCTGAATCCAATTTCACAGCCAAGGTTACTGCTGTCAATAGTCTTGGAAGCTCCTCTTCACT TCCATCCACATTCACATTCTTGGACATAGTGAGGCCTCTTCCTCCGTGGGACATTAGAATCAAATTTCAAAAGGC TTCCGTGAGCAGATGTACCCTTTATTGGAGAGATGAGGGACTGGTACTGCTTAATCGACTCAGATATCGGCCCAG TAACAGCAGGCTCTGGAATATGGTTAATGTTACAAAGGCCAAAGGAAGACATGATTTGCTGGATCTGAAACCATT TACAGAATATGAATTTCAGATTTCCTCTAAGCTACATCTTTATAAGGGAAGTTGGAGTGATTGGAGTGAATCATT GAGAGCACAAACACCAGAAGAAGAGCCTACTGGGATGTTAGATGTCTGGTACATGAAACGGCACATTGACTACAG TAGACAACAGATTTCTCTTTTCTGGAAGAATCTGAGTGTCTCAGAGGCAAGAGAGAAAATTCTCCACTATCAGGT GACCTTGCAGGAGCTGACAGGAGGGAAAGCCATGACACAGAACATCACAGGACACACCTCCTGGACCACAGTCAT TCCTAGAACCGGAAATTGGGCTGTGGCTGTGTCTGCAGCAAATTCAAAAGGCAGTTCTCTGCCCACTCGTATTAA CATAATGAACCTGTGTGAGGCAGGGTTGCTGGCTCCTCGCCAGGTCTCTGCAAACTCAGAGGGCATGGACAACAT TCTGGTGACTTGGCAGCCTCCCAGGAAAGATCCCTCTGCTGTTCAGGAGTACGTGGTGGAATGGAGAGACCTCCA TCCAGGGGGTGACACACAGGTCCCTCTAAACTGGCTACGGAGTCGACCCTACAATGTGTCTGCTCTGATTTCAGA GAACATAAAATCCTACATCTGTTATGAAATCCGTGTGTATGCACTCTCAGGGGGATCAAGGAGGATGCAGCTCCAT CCTGGGTAACTCTAAGCACAAAGCACCACTGAGTGGCCCCCACATTAATGCCATCACAGAGGAAAAGGGGAGCAT TTTAATTTCATGGAACAGCATTCCAGTCCAGGAGCAAATGGGCTGCCTCCTCCATTATAGGATATACTGGAAGGA ACGGGACTCCAACTCCCAGCCTCAGCTCTGTGAAATTCCCTACAGAGTCTCCCAAAATTCACATCCAATAAACAG CCTGCAGCCCCGAGTGACATATGTCCTGTGGATGACAGCTCTGACAGCTGCTGGTGAAAGTTCCCACGGAAATGA GAGGGAATTTTGTCTGCAAGGTAAAGCCAATTGGATGGCGTTTGTGGCACCAAGCATTTGCATTGCTATCATCAT TAGCAGAGAAATTCCAGATCCAGCAAATAGCACTTGCGCTAAGAAATATCCCATTGCAGAGGAGGAGACACAGCT GCCCTTGGACAGGCTCCTGATAGACTGGCCCACGCCTGAAGATCCTGAACCGCTGGTCATCAGTGAAGTCCTTCA TCAAGTGACCCCAGTTTTCAGACATCCCCCCTGCTCCAACTGGCCACAAAGGGAAAAAGGAATCCAAGGTCATCA GGCCTCTGAGAAAGACATGATGCACAGTGCCTCAAGCCCACCACCTCCAAGAGCTCTCCAAGCTGAGAGCAGACA ACTGGTGGATCTGTACAAGGTGCTGGAGAGCAGGGGCTCCGACCCAAAGCCAGAAAACCCAGCCTGTCCCTGGAC GGTGCTCCCAGCAGGTGACCTTCCCACCCATGATGGCTACTTACCCTCCAACATAGATGACCTCCCCTCACATGA GGCACCTCTCGCTGACTCTCTGGAAGAACTGGAGCCTCAGCACATCTCCCTTTCTGTTTTCCCCTCAAGTTCTCT TCACCCACTCACCTTCTCCTGTGGTGATAAGCTGACTCTGGATCAGTTAAAGATGAGGTGTGÄCTCCCTCATGCT CTGAGTGGTGAGGCTTCAAGCCTTAAAGTCAGTGTGCCCTCAACCAGCACAGCCTGCCCCAATTCCCCCAGCCCC TGCTCCAGCAGCTGTCATCTCTGGGTGCCACCATCGGTCTGGCTGCAGCTAGAGGACAGGCAAGCCAGCTCTGGG GGAGTCTTAGGAACTGGGAGTTGGTCTTCACTCAGATGCCTCATCTTGCCTTTCCCAGGGCCTTAAAATTACATC CTTCACTGTGTGGACCTAGAGACTCCAACTTGAATTCCTAGTAACTTTCTTGGTATGCTGGCCAGAAAGGGAAAT GAGGAGGAGAGTAGAAACCACAGCTCTTAGTAGTAATGGCATACAGTCTAGAGGACCATTCATGCAATGACTATT

681/2682 FIGURE 624B

TCTAAAGCACCTGCTACACAGCAGGCTGTACACAGCAGATCAGTACTGTTCAACAGAACTTCCTGAGATGATGGA
AATGTTCTACCTCTGCACTCACTGTCCAGTACATTAGACACTAGGCACATTGGCTGTTAATCACTTGGAATGTGT
TTAGCTTGACTGAGGAATTAAATTTTGATTGTAAATTTAAATCGCCACACATGGCTAGTGGCTACTGTATTGGAG
TGCACAGCTCTAGATGGCTCCTAGATTATTGAGAGCCTCCAAAACAAATCAACCTAGTTCTATAGATGAAGACAT
AAAAGACACTGGTAAACACCAATGTAAAAAGGGCCCCCCAAGGTGGTCATGACTGGTCTCATTTGCAGAAGTCTAAG
AATGTACCTTTTTCTGGCCGGGCGTGGTAGCTCATGCCTGTAATCCCAGCACTTTGGGAGGCTGA

682/2682 FIGURE 625

MAHTFRGCSLAFMFIITWLLIKAKIDACKRGDVTVKPSHVILLGSTVNITCSLKPRQGCFHYSRRNKLILYKFDR RINFHHGHSLNSQVTGLPLGTTLFVCKLACINSDEIQICGAEIFVGVAPEQPQNLSCIQKGEQGTVACTWERGRD THLYTEYTLQLSGPKNLTWQKQCKDIYCDYLDFGINLTPESPESNFTAKVTAVNSLGSSSSLPSTFTFLDIVRPL PPWDIRIKFQKASVSRCTLYWRDEGLVLLNRLRYRPSNSRLWNMVNVTKAKGRHDLLDLKPFTEYEFQISSKLHL YKGSWSDWSESLRAQTPEEEPTGMLDVWYMKRHIDYSRQQISLFWKNLSVSEARGKILHYQVTLQELTGGKAMTQ NITGHTSWTTVIPRTGNWAVAVSAANSKGSSLPTRINIMNLCEAGLLAPRQVSANSEGMDNILVTWQPPRKDPSA VQEYVVEWRELHPGGDTQVPLNWLRSRPYNVSALISENIKSYICYEIRVYALSGDQGGCSSILGNSKHKAPLSGPHINAITEEKGSILISWNSIPVQEQMGCLLHYRIYWKERDSNSQPQLCEIPYRVSQNSHPINSLQPRVTYVLWMTA LTAAGESSHGNEREFCLQGKANWMAFVAPSICIAIIMVGIFSTHYFQQKVFVLLAALRPQWCSREIPDPANSTCA KKYPIAEEKTQLPLDRLLIDWPTPEDPEPLVISEVLHQVTPVFRHPPCSNWPQREKGIQGHQASEKDMMHSASSPPPRALQAESRQLVDLYKVLESRGSDPKPENPACPWTVLPAGDLPTHDGYLPSNIDDLPSHEAPLADSLEELEPQ HISLSVFPSSSLHPLTFSCGDKLTLDQLKMRCDSLML

683/2682 FIGURE 626

684/2682 FIGURE 627

MAAVDIRDNLLGISWVDSSWIPILNSGSVLDYFSERSNPFYDRTCNNEVVKMQRLTLEHLNQMVGIEYILLHAQE PILFIIRKQQRQSPAQVIPLADYYIIAGVIYQAPDLGSVINSRVLTAVHGIQSAFDEAMSYCRYHPSKGYWWHFK DHEEQGK

685/2682 FIGURE 628

686/2682 FIGURE 629

 ${\tt MNLSRGKSTYYWPRPRRYVQPPEVIGPMRPEQFSDEVEPATPEEGEPATQRQDPAAAQEGEDEGASAGQGPKPEADSQEQGHPQTGCECEDGPDGQEMDPPNPEEVKTPEEGEKQSQC}$

687/2682 FIGURE 630

CACACCCTGACAAGCTGCCAGGCAGGTTCTCTTCCTCTCACATACTGACCCACGGCTCCACCCTCTCTCCCCTGG AAAGGACACCATGAGACACTGAAAGCATGATCCGGGACGTGGAGCTGGCCGAGGAGGCGCTCCCCAAGAAGACAGG GGGGCCCCAGGGCTCCAGGCGTGCTTGTTCCTCAGCCTCTTCTCCTGATCGTGGCAGGCGCCACCACGCT TCTGGCCCAGGCAGTCAGATCATCTTCTCGAACCCCGAGTGACAAGCCTGTAGCCCATGTTGTAGCAAACCCTCA AGCTGAGGGGCAGCTCCAGTGGCTGAACCGCCGGGCCAATGCCCTCCTGGCCAATGGCGTGGAGCTGAGAGATAA CCAGCTGGTGGTGCCATCAGAGGGCCTGTACCTCATCTACTCCCAGGTCCTCTTCAAGGGCCCAAGGCTGCCCCTC CACCCATGTGCTCCTCACCCACACCATCAGCCGCATCGCCGTCTCCTACCAGACCAAGGTCAACCTCCTCTCTGC AGGGGTCTTCCAGCTGGAGAAGGGTGACCGACTCAGCGCTGAGATCAATCGGCCCGACTATCTCGACTTTGCCGA $\tt GTCTGGGCAGGTCTACTTTGGGATCATTGCCCTG\underline{TGA} GGAGGACGAACATCCAACCTTCCCAAACGCCTCCCCTG$ CCCCAATCCCTTTATTACCCCCTCCTTCAGACACCCTCAACCTCTTCTGGCTCAAAAAAGAAATTGGGGGCTTAG GGTCGGAACCCAAGCTTAGAACTTTAAGCAACAAGACCACCTTCGAAACCTGGGATTCAGGAATGTGTGGCCT GCACAGTGAAGTGCTGGCAACCACTAAGAATTCAAACTGGGGCCTCCAGAACTCACTGGGGCCTACAGCTTTGAT CCCTGACATCTGGAATCTGGAGACCAGGGAGCCTTTGGTTCTGGCCAGAATGCTGCAGGACTTGAGAAGACCTCA CCTAGAAATTGACACAAGTGGACCTTAGGCCTTCCTCTCTCCAGATGTTTCCAGACTTCCTTGAGACACGGAGCC TTATTTACAGATGAATGTATTTATTTGGGAGACCGGGGTATCCTGGGGGACCCAATGTAGGAGCTGCCTTGGCTC AGACATGTTTTCCGTGAAAACGGAGGCTGAACAATAGGCTGTTCCCATGTAGCCCCCTGGCCTCTGTGCCTTCTT TTGATTATGTTTTTTAAAATATTATCTGATTAAGTTGTCTAAACAATGCTGATTTGGTGACCAACTGTCACTCAT TGCTGAGGCCTCTGCTCCCCAGGGAGTTGTGTCTGTAATCGGCCTACTATTCAGTGGCGAGAAATAAAGGTTGCT TAGGAAAGAA

688/2682 FIGURE 631

MSTESMIRDVELAEEALPKKTGGPQGSRRCLFLSLFSFLIVAGATTLFCLLHFGVIGPQREESPRDLSLISPLAQ AVRSSSRTPSDKPVAHVVANPQAEGQLQWLNRRANALLANGVELRDNQLVVPSEGLYLIYSQVLFKGQGCPSTHV LLTHTISRIAVSYQTKVNLLSAIKSPCQRETPEGAEAKPWYEPIYLGGVFQLEKGDRLSAEINRPDYLDFAESGQ VYFGIIAL

689/2682 FIGURE 632A

CATGGCGGCGACTGCGGCAAAGCGAGAGCCTCGGAGACGCCGCTGCCGCCAGCACAGCCGGAGATCTGAGCCGAC ACTGGGGGCAGTCCGCGAGCCCCGCACTCTCTCGATGAGTCGGAGAAGTCCCGTTGTATCAGAGTAAGATGGACG GTAGCTTTGATTGTGATTGTGGTGAGCTGGAGCCACCTGATCACTAACAAAAGACATCTTCTGTTAACCAACAGC CGCCAGGCTTCCTGTTGAAATAAATATATAGCAACAAAGGAAAAAAAGAAGCAAAACGGAAATAGTGCTTACCAG CACCTTAGAATGATGCTGCTCAGGACCAGTCCAACACTGAATGTATCTGCACTGTGAGGAGAATGTTCATAGAAG ${\tt CCTGTTGTGCATATTTATTCACTTTTTGTTAAATGTTAAATCGTTTAGCACGGTAATCTGAGTGCACAGTATG}$ TCATTTCATTCCGTTTGAGTTTCTTGTTTTCGTTAAATGTCTGCAGAGTTGCTGCCCCTTTCTTGAACTATGAGT ACTGCAATCTTTTTAATTCTCAATATGAATAGAGCTTTTTGAGCTTTAAATCTAAGGGGAACTCGACAGGCCTGT TTGGCATATGCAATGAACATCAAGAAACCATCTTGCTGTGGAAGCATAATTATTTTTCTTCTCCCTTTTTGAAAG ATCTTTCCTTTTGATGCCAGTTTTCTTCCTTGTTTACACAAGTTCAATTTGAAAGGAAAAGGCAATAGTAAGGGT TTCAAA**ATG**GCAGAGAAATTTGAAAGTCTCATGAACATTCATGGTTTTGATCTGGGTTCTAGGTATATGGACTTA AAACCATTGGGTTGTGGAGGCAATGGCTTGGTTTTTTCTGCTGTAGACAATGACTGTGACAAAAGAGTAGCCATC AAGAAAATTGTCCTTACTGATCCCCAGAGTGTCAAACATGCTCTACGTGAAATCAAAATTATTAGAAGACTTGAC CATGATAACATTGTGAAAGTGTTTGAGATTCTTGGTCCCAGTGGAAGCCAATTAACAGACGATGTGGGCTCTCTT TTACTGGAAGAGCATGCCAGGCTTTTCATGTATCAGCTGCTACGGGGGCTCAAGTATATTCACTCTGCAAATGTA CTGCACAGAGATCTCAAACCAGCTAATCTTTTCATTAATACGGAAGACTTGGTGCTGAAGATAGGTGACTTTGGT CTTGCACGGATCATGGATCCTCATTATTCCCATAAGGGTCATCTTTCTGAAGGATTGGTTACTAAATGGTACAGA TCTCCACGTCTTTTACTTCTCCTAATAATTATACTAAAGCCATTGACATGTGGGCTGCAGGCTGCATCTTTGCT GAAATGCTGACTGGTAAAACCCTTTTTGCAGGTGCACATGAACTTGAACAGATGCAGCTGATTTTAGAATCTATT CCTGTTGTACATGAGGAAGATCGTCAGGAGCTTCTCAGCGTAATTCCAGTTTACATTAGAAATGACATGACTGAG CCACACAAACCTTTAACTCAGCTGCTTCCAGGAATTAGTCGAGAAGCACTGGATTTCCTGGAACAAATTTTGACA TTTAGCCCCATGGATCGGTTAACAGCAGAAGAAGCACTCTCCCATCCTTACATGAGCATATATTCTTTTCCAATG GATGAGCCAATTTCAAGCCATCCTTTTCATATTGAAGATGAAGTTGATGATATTTTGCTTATGGATGAAACTCAC AGTCACATTTATAACTGGGAAAGGTATCATGATTGTCAGTTTTCAGAGCATGATTGGCCTGTACATAACAACTTT GATATTGATGAAGTTCAGCTTGATCCAAGAGCTCTGTCCGATGTCACTGATGAAGAAGAAGTACAAGTTGATCCC CGAAAATATTTGGATGGAGATCGGGAAAAGTATCTGGAGGATCCTGCTTTTGATACCAATTACTCTACTGAGCCT TGTTGGCAATACTCAGATCATCATGAAAACAAATATTGTGATCTGGAGTGTAGCCATACTTGTAACTACAAAACG ATAGATCTTTCCAATTGGAAAGAACAAAGCAAAGAAAAATCTGATAAGAAAGGCAAATCAAAATGTGAAAGGAAT GGATTTGATTTTGATTCCTTTATTGCAGGAACTATTCAGCTTAGTTCCCAGCATGAGCCTACTGATGTTGTTGAT AAATTAAATGACTTGAATAGCTCAGTGTCCCAACTAGAATTGAAAAGTTTGATATCAAAGTCAGTAAGCCAAGAA AAACAGGAAAAAGGAATGGCAAATCTGGCTCAATTAGAAGCCTTGTACCAGTCTTCTTGGGACAGCCAGTTTGTG ACTTACACTAGTTACTTGGACAAGTTCTTTAGCAGGAAAGAAGATACTGAAATGCTAGAAACTGAGCCAGTAGAG GATGGGAAGCTTGGGGAGAGAGACATGAGGAAGGATTTCTGAACAACAGTGGGGAGTTCCTCTTTAACAAGCAG CTCGAGTCCATAGGCATCCCACAGTTTCACAGTCCAGTTGGGTCACCACTTAAGTCAATACAGGCCACATTAACA CCTTCTGCTATGAAATCTTCCCCTCAAATTCCTCATCAAACATACAGCAGCATTCTGAAACATCTGAAC<u>TAA</u>AAC TCTACATGTGAGATAGTTTTCATTTTAACTGGCATGTCATTTGCACACAAAAATAAAGACTAGAGCAAAATAATG CAACGCAGGAGGAGAAAAGAAATGCACTAAGACAAGAACATTCTCTCATAGAACATTGATCTGTTTTACAGGAAA CAAACCTTGCCTTGAAATTTACACAGTGAGACTGTACATAATTGCATGAAAATAGCTATTTTTTTCCTAAGACAT TTTTCATTCATGAATATTTTCAAGTTTTTCATACTGTACACATTTCTTAAAACACATGATACCAGCAGCAACTGA **AAATGAATGCCGAATTTGGTACACATGTGTTATCTACCTCAAGGTAACAAGAGTATGTGGCAAAACATATACCAC**

690/2682 FIGURE 632B

691/2682 FIGURE 633

MAEKFESLMNIHGFDLGSRYMDLKPLGCGGNGLVFSAVDNDCDKRVAIKKIVLTDPQSVKHALREIKIIRRLDHD
NIVKVFEILGPSGSQLTDDVGSLTELNSVYIVQEYMETDLANVLEQGPLLEEHARLFMYQLLRGLKYIHSANVLH
RDLKPANLFINTEDLVLKIGDFGLARIMDPHYSHKGHLSEGLVTKWYRSPRLLLSPNNYTKAIDMWAAGCIFAEM
LTGKTLFAGAHELEQMQLILESIPVVHEEDRQELLSVIPVYIRNDMTEPHKPLTQLLPGISREALDFLEQILTFS
PMDRLTAEEALSHPYMSIYSFPMDEPISSHPFHIEDEVDDILLMDETHSHIYNWERYHDCQFSEHDWPVHNNFDI
DEVQLDPRALSDVTDEEEVQVDPRKYLDGDREKYLEDPAFDTNYSTEPCWQYSDHHENKYCDLECSHTCNYKTRS
SSYLDNLVWRESEVNHYYEPKLIIDLSNWKEQSKEKSDKKGKSKCERNGLVKAQIALEEASQQLAGKEREKNQGF
DFDSFIAGTIQLSSQHEPTDVVDKLNDLNSSVSQLELKSLISKSVSQEKQEKGMANLAQLEALYQSSWDSQFVSG
GEDCFFINQFCEVRKDEQVEKENTYTSYLDKFFSRKEDTEMLETEPVEDGKLGERGHEEGFLNNSGEFLFNKQLE
SIGIPQFHSPVGSPLKSIQATLTPSAMKSSPQIPHQTYSSILKHLN

692/2682 FIGURE 634

GGCCTTGGGGCTTTGTGAGATAGCTAGGGTCGACTTGTGTGGATTCTAGTAGAACGGAGCTGACCCTATCCGAAC AGGCCCTGCCTGCTTGGATAGAGGCCTCCGAACAGGAGTAAAGAATGGCTGTTGAACATCCACAAGGCACCTGC AAGACTATGAATCAAAGTTGAGACCAAGAAATTATTTCTGAAAAAGGAT<u>ATG</u>GAAAAACCTTACAAAACACAGCAT TTTCAGTGAAATGATATTTACTCCTGAAGACATGCCCACTTTCAGTATCCAGCATCAGAGAATTCATACTGATGA GAAACTCCTTGAATGTAAGGAATGTGGGAAGGATTTTAGTTTTGTATCAGTCCTTGTTCGACATCAGCGAATTCA TACTGGTGAGAAACCTTATGAATGCAAAGAATGTGGCAAGGCCTTTGGTAGTGGTGCAAACCTTGCTTACCATCA AAGAATTCATACTGGTGAGAAGCCTTTTGAATGTAAAGAATGTGGGAAGGCCTTTGGTAGTGGCTCAAACCTTAC TCACCATCAGAGAATTCATACTGGTGAGAAACCCTATGAGTGTAAGGAATGTGGGAAAGCCTTTAGTTTTGGATC AGGCCTTATACGACATCAGATCATTCACAGTGGAGAGAGCCTTATGAGTGTAAGGAATGTGGGAAGTCCTTTAG TTTTGAATCAGCCCTTATTCGGCATCACAGAATTCACACAGGTGAGAAACCTTATGAATGTATAGATTGTGGTAA AGCCTTTGGCAGTGGTTCAAACCTTACTCAACATCGGCGGATTCATACTGGTGAGAAACCTTATGAATGCAAAGC ATGTGGAATGGCCTTTAGCAGTGGTTCGGCTCTTACTCGGCATCAGAGAATTCATACCGGTGAGAAACCATATAT ATGTAATGAATGTGGTAAGGCCTTTAGTTTTGGATCAGCCCTTACTCGACATCAAAGAATTCATACTGGTGAGAA TGGTGAGAAACCCTATGAGTGTAAGGAGTGTGAGAAAGCCTTTAGAAGTGGTTCAAAACTTATTCAGCATCAAAG AATGCATACTGGAGAGAAACCTTATGAATGTAAGGAATGTGGGAAGACCTTTAGTAGTGGTTCAGACCTTACTCA ACATCACAGAATTCATACTGGTGAGAAACCCTATGAATGTAAGGAATGTGGGAAGGCCTTTGGTAGTGGCTCAAA ACTTATCCAACACCAGCTAATCCATACTGGTGAAAGACCCTATGAATGTAAAGAATGTGGAAAGTCCTTTAGTAG TGGTTCAGCTCTTAATCGGCACCAGAGAATACACACTGGTGAGAAACCCTATGAATGTAAGGAGTGTGGGAAGGC TTTTTATAGTGGCTCAAGCCTTACTCAGCATCAGAGAATTCATACAGGTGAGAAACTTTATGAATGTAAGAACTG TGGGAAGGCTTATGGGAGGGATTCAGAGTTTCAGCAACATAAGAAAAGTCATAATGGTAAGAAACTCTGCGAATT $\tt GGAAACTATAAAT{\color{red}{\textbf{TGA}}} AATTATGTGCTGAAGGAAGGACTCTAAACATATGACTTAAGAAAATTCATAGTGGTGAA$ AAATTCTTACTTGTGAATGTTAAAAATGAAAAAAAAATCATTTATTATTATTTTGCCTCAACTTTAAACATTGGAA AACTCATTTCTGGGTTAATC

693/2682 FIGURE 635

MENLTKHSIECSSFRGDWECKNQFERKQGSQEGHFSEMIFTPEDMPTFSIQHQRIHTDEKLLECKECGKDFSFVS VLVRHQRIHTGEKPYECKECGKAFGSGANLAYHQRIHTGEKPFECKECGKAFGSGSNLTHHQRIHTGEKPYECKE CGKAFSFGSGLIRHQIIHSGEKPYECKECGKSFSFESALIRHRIHTGEKPYECIDCGKAFGSGSNLTQHRRIHT GEKPYECKACGMAFSSGSALTRHQRIHTGEKPYICNECGKAFSFGSALTRHQRIHTGEKPYVCKECGKAFNSGSD LTQHQRIHTGEKPYECKECEKAFRSGSKLIQHQRMHTGEKPYECKECGKTFSSGSDLTQHHRIHTGEKPYECKEC GKAFGSGSKLIQHQLIHTGERPYECKECGKSFSSGSALNRHQRIHTGEKPYECKECGKAFYSGSSLTQHQRIHTG EKLYECKNCGKAYGRDSEFQQHKKSHNGKKLCELETIN

694/2682 FIGURE 636

GAGGGTGTTGAGGCTAGGAGGCCACGATAAACAGGATACGATAAAAGTCCTTAACCAAGACGCAGATGGGAAGAA ${\tt GCGTTAGAGCGAGCACTCACATCTCAAGAACCAGCCTTTCAAACAGTTTCCAGAG} {\color{red} {\bf ATG}} {\tt GATTATCCTACTTT}$ ACTTTTGGCTCTTCTTCATGTATACAGAGCTCTATGTGAAGAGGTGCTTTGGCATACATCAGTTCCCTTTGCCGA GAACATGTCTCTAGAATGTGTATCCATCAATGGGCATCTTAACACAGGTGGAGTGGTTCAAGATCGGGACCCA GCAGGATTCCATAGCCATTTTCAGCCCTACTCATGGCATGGTCATAAGGAAGCCCTATGCTGAGAGGGTTTACTT GACGTGGCCTGTGCAGGCAGTGAGGTGGGAAAAGATCCAGCCCCGTCAGATCGACCTCTTAACTTACTGCAACTT GGTCCATGGCAGAAATTTCACCTCCAAGTTCCCAAGACAAATAGTGAGCAACTGCAGCCACGGAAGGTGGAGCGT CATCGTCATCCCCGATGTCACAGTCTCAGACTCGGGGCTTTACCGCTGCTACTTGCAGGCCAGCGCAGGAGAAAA CGAAACCTTCGTGATGAGATTGACTGTAGCCGAGGGTAAAACCGATAACCAATATACCCTCTTTGTGGCTGGAGG GACAGTTTTATTGTTGTTTGTTATCTCAATTACCACCATCATTGTCATTTTCCTTAACAGAAGGAGAAGGAG AGAGAGAGAGATCTATTTACAGAGTCCTGGGATACACAGAAGGCACCCAATAACTATAGAAGTCCCATCTCTAC CGGTCAACCTACCAATCAATCCATGGATGATACAAGAGAGATATTTATGTCAACTATCCAACCTTCTCTCGCAG TTTATGCAATTTTTTCCACTACCCAAGGTCTACCTTAGATACTAGTTGTCTGAATTGAGTTACTTTGATAGGAA AAATACTTCATTACCTAAAATCATTTTTCATAGAACTGTTTCAGAAAACCTGACTCTAACTGGTTTATATACAAA AGAAAACTTACTGTATCATATAACAGAATGATCCAGGGGAAGATTAAGCTTTGGGCAAGGGCTATTTACCAGGGCT TAAATGTTGTGTCTAGAATTAAGTATGGGCATAAACTGGCTTCTGAATCCCTTTCCAGAGTGTTGGATCCATTTC CCTGGTCTTGGCCTCACTCTCATGCAGGCTTTCCTCTTGTGTTGGCAAGATGGCTGCCAACTCTTGGCAATTCAT AATAGGCAACATGACCAGAAAGGATGGAATGGCTTAAGTAAACTAAGGGTTCACTTCTAGAGCTGAGAAGCAGGG TCAAAGCACAATACTGGGCAATTCAGAGCATGGTTAGAAGAGGGAAAGGGGAGTCTCAAAGCTGGAGAGTTTACCA TGGGGTATCTCTGTCCATACTTCTAGAATCCACTCTATCAGCATAGTCCAGAAGAATACCTGGCAGTAGAAGAAA TGTTTTGGACATATTTTGTCTACTTTTGAGAATTATTTTTAATATGTAAATTCTCTCAAAAGGGTCAGGCACCTA AGGATGGTAGGGTAGAAATTTGGGAGGGAAAAAAGAAATTGGGAGGGTACAGGCAACAGGAGAAAGGAATCAAAC CACAGAAAAATACAAAGGGAAACTTCTGCTTCACTATTCAGACAAGACAGCCCTAATGACATCACCAACAGTCA AAGCAATTAGAGACCATACCTAATATTGTTTAAATTCTAGATGTAGGCTAACAATGAAAAGTATTTGCCAAACTG

695/2682 FIGURE 637

MDYPTLLLALLHVYRALCEEVLWHTSVPFAENMSLECVYPSMGILTQVEWFKIGTQQDSIAIFSPTHGMVIRKPY AERVYFLNSTMASNNMTLFFRNASEDDVGYYSCSLYTYPQGTWQKVIQVVQSDSFEAAVPSNSHIVSEPGKNVTL TCQPQMTWPVQAVRWEKIQPRQIDLLTYCNLVHGRNFTSKFPRQIVSNCSHGRWSVIVIPDVTVSDSGLYRCYLQ ASAGENETFVMRLTVAEGKTDNQYTLFVAGGTVLLLLFVISITTIIVIFLNRRRRERRDLFTESWDTQKAPNNY RSPISTGQPTNQSMDDTREDIYVNYPTFSRRPKTRV

696/2682 FIGURE 638A

GGCGGCTCGGGACGGACGCGCTAGTGTGAGTGCGGGCTTCTAGAACTACACCGACCCTCGTGTCCTCCCTTC ATCCTGCGGGGCTGGCTGGAGCGGCCGCTCCGGTGCTGTCCAGCAGCCATAGGGAGCCGCACGGGGAGCGGGAAA GCGGTCGCGGCCCCAGGCGGGGCGGCCGGGATGGAGCGGGGCCGGGGGCCTGTGGGGGAAGGGGCTGTGGCGGCGC $\tt CTCGAGCGGCTGCAGGTTCTTCTGTGTGGCAGTTCAGA{\color{blue}ATTGAGATCAAGCTAGATCAGCATTCTCTAACTTGTCTGAGCTAGATCAGCATTCTCTAACTTGTCTGAGCTAGATCAGCATTCTCTAACTTGTCTGAGCTAGATCAGCTAGATCAGCATTCTCTAACTTGTCTGAGCTAGATCAGCTAGATCAGCATTCTCTAACTTGTCTGAGCTAGATCAGCTAGATCAGCTAGATCAGCATTCTCTAACTTGTCTGAGCTAGATCAGATCAGAT$ TTGGTGGAGAACCATTGTCATATACCCGGTTCAGCCTGGCTCGGCAAGTAGATGGCGATAACAGTCATGTGGAGA TGAAACTTGCTGTAGATGAAGAAGAAATGCTGACAATAACACAAAGGCCAATGTCACAAAACCAAAAAGGTGTA GTGGAAGTATCTGCTATGGGACTATTGCTGTGATCGTCTTTTTCTTGATTGGATTTATGATTGGCTACTTGGGCT GAGAGGACTTCCCTGCAGCACGTCGCTTATATTGGGATGACCTGAAGAGAAAGTTGTCGGAGAAACTGGACAGCA CAGACTTCACCAGCACCATCAAGCTGCTGAATGAAAATTCATATGTCCCTCGTGAGGCTGGATCTCAAAAAGATG AAAATCTTGCGTTGTATGTTGAAAATCAATTTCGTGAATTTAAACTCAGCAAAGTCTGGCGTGATCAACATTTTG TTAAGATTCAGGTCAAAGACAGCGCTCAAAACTCGGTGATCATAGTTGATAAGAACGGTAGACTTGTTTACCTGG TGGAGAATCCTGGGGGTTATGTGGCGTATAGTAAGGCTGCAACAGTTACTGGTAAACTGGTCCATGCTAATTTTG GTACTAAAAAAGATTTTGAGGATTTATACACTCCTGTGAATGGATCTATAGTGATTGTCAGAGCAGGGAAAATCA CCTTTGCAGAAAAGGTTGCAAATGCTGAAAGCTTAAATGCAATTGGTGTTGATATACATGGACCAGACTAAAT TTCCCATTGTTAACGCAGAACTTTCATTCTTTGGACATGCTCATCTGGGGACAGGTGACCCTTACACACCTGGAT TCCCTTCCTTCAATCACACTCAGTTTCCACCATCTCGGTCATCAGGATTGCCTAATATACCTGTCCAGACAATCT CCAGAGCTGCTGCAGAAAAGCTGTTTGGGAATATGGAAGGAGACTGTCCCTCTGACTGGAAAACAGACTCTACAT GTAGGATGGTAACCTCAGAAAGCAAGAATGTGAAGCTCACTGTGAGCAATGTGCTGAAAGAGATAAAAATTCTTA ACATCTTTGGAGTTATTAAAGGCTTTGTAGAACCAGATCACTATGTTGTAGTTGGGGCCCAGAGAGATGCATGGG GCCCTGGAGCTGCAAAATCCGGTGTAGGCACAGCTCTCCTATTGAAACTTGCCCAGATGTTCTCAGATATGGTCT TAAAAGATGGGTTTCAGCCCAGCAGAAGCATTATCTTTGCCAGTTGGAGTGCTGGAGACTTTGGATCGGTTGGTG CCACTGAATGGCTAGAGGGATACCTTTCGTCCCTGCATTTAAAGGCTTTCACTTATATTAATCTGGATAAAGCGG TTCTTGGTACCAGCAACTTCAAGGTTTCTGCCAGCCCACTGTTGTATACGCTTATTGAGAAAACAATGCAAAATG TGAAGCATCCGGTTACTGGGCAATTTCTATATCAGGACAGCAACTGGGCCAGCAAAGTTGAGAAACTCACTTTAG ATCCTTATTTGGGTACCACCATGGACACCTATAAGGAACTGATTGAGAGGATTCCTGAGTTGAACAAAGTGGCAC GAGCAGCTGCAGAGGTCGCTGGTCAGTTCGTGATTAAACTAACCCATGATGTTGAATTGAACCTGGACTATGAGA GGTACAACAGCCAACTGCTTTCATTTGTGAGGGATCTGAACCAATACAGAGCAGACATAAAGGAAATGGGCCTGA GTTTACAGTGGCTGTATTCTGCTCGTGGAGACTTCTTCCGTGCTACTTCCAGACTAACAACAGATTTCGGGAATG CTGAGAAAACAGACAGATTTGTCATGAAGAAACTCAATGATCGTGTCATGAGAGTGGAGTATCACTTCCTCTCTC CCTACGTATCTCCAAAAGAGTCTCCTTTCCGACATGTCTTCTGGGGCTCCGGCTCTCACACGCTGCCAGCTTTAC TGGAGAACTTGAAACTGCGTAAACAAAATAACGGTGCTTTTAATGAAACGCTGTTCAGAAACCAGTTGGCTCTAG $\tt CTACTTGGACTATTCAGGGAGCTGCAAATGCCCTCTCTGGTGACGTTTGGGACATTGACAATGAGTTT{\color{red}{TAA}} {\color{blue}{A}} {\color{blue}{A}} {\color{blue}{A}} {\color{blue}{CTACTTGGGACATTGACAATGAGTTT} {\color{blue}{TAA}} {\color{blue}{A}} {\color{blue}{A}} {\color{blue}{A}} {\color{blue}{A}} {\color{blue}{A}} {\color{blue}{CTACTTGGGACATTGACAATGAGTTT} {\color{blue}{TAA}} {\color{blue}{A}} {\color{blue}{A}} {\color{blue}{A}} {\color{blue}{A}} {\color{blue}{A}} {\color{blue}{A}} {\color{blue}{A}} {\color{blue}{A}} {\color{blue}{CTACTTGGGACATTGACAATGAGTTT} {\color{blue}{TAA}} {\color{blue}{A}} {\color{blue}{A$ GATACCCATAGCTTCCATGAGAACAGCAGGGTAGTCTGGTTTCTAGACTTGTGCTGATCGTGCTAAATTTTCAGT AGGGCTACAAAACCTGATGTTAAAATTCCATCCCATCATCTTGGTACTACTAGATGTCTTTAGGCAGCAGCTTTT AATACAGGGTAGATAACCTGTACTTCAAGTTAAAGTGAATAACCACTTAAAAAATGTCCATGATGGAATATTCCC CTATCTCTAGAATTTTAAGTGCTTTGTAATGGGAACTGCCTCTTTCCTGTTGTTGATGAAAATGTCAGAAAC CAGTTATGTGAATGATCTCTCTGAATCCTAAGGGCTGGTCTCTGCTGAAGGTTGTAAGTGGTTCGCTTACTTTGA GTGATCCTCCAACTTCATTTGATGCTAAATAGGAGATACCAGGTTGAAAGACCTCTCCAAATGAGATCTAAGCCT TTGCCAATGAGGTCTGAAATGGAGGTCCTTCTGCTGGATAAAATGAGGTTCAACTGTTGATTGCAGGAATAAGGC CTTAATATGTTAACCTCAGTGTCATTTATGAAAAGAGGGGACCAGAAGCCCAAAGACTTAGTATATTTTCTTTTCC CAGTTTCAGGTGTTTAGTTGCAGACTCAGTTTGTCAGACTTTAAAGAATAATATGCTGCCAAATTTTGGCCAAAG ACTATAAATGGTGTTTTTTTAATAGAATATAATTATCGGAAGCAGTGCCTTCCATAATTATGACAGTTATACTGT CGGTTTTTTTTAAATAAAAGCAGCATCTGCTAATAAAACCCAACAGATACTGGAAGTTTTGCATTTATGGTCAAC

697/2682 FIGURE 638B

ACTTAAGGGTTTTAGAAAACAGCCGTCAGCCAAATGTAATTGAATAAAGTTGAAGCTAAGATTTAGAGATGAATT AAATTTAATTAGGGGTTGCTAAGAAGCGAGCACTGACCAGATAAGAATGCTGGTTTTCCTAAATGCAGTGAATTG TGACCAAGTTATAAATCAATGTCACTTAAAGGCTGTGGTAGTACTCCTGCAAAATTTTATAGCTCAGTTTATCCA AGGTGTAACTCTAATTCCCATTTGCAAAATTTCCAGTACCTTTGTCACAATCCTAACACATTATCGGGAGCAGTG GTTACACTAAGGGTGTAAGTAATTATCGGGAACAGTGTTTCCCATAATTTTCTTCATGCAATGACATCTTCAAAG CTTGAAGATCGTTAGTATCTAACATGTATCCCAACTCCTATAATTCCCTATCTTTTAGTTTTAGTTGCAGAAACA TTTTGTGGTCATTAAGCATTGGGTGGGTAAATTCAACCACTGTAAAATGAAATTACTACAAAATTTGAAATTTAG ${\tt CTTGGGTTTTTGTTACCTTTATGGTTTCTCCAGGTCCTCTACTTAATGAGATAGCAGCATACATTTATAATGTTT}$ · GCTATTGACAAGTCATTTTAATTTATCACATTATTTGCATGTTACCTCCTATAAACTTAGTGCGGACAAGTTTTA ATCCAGAATTGACCTTTTGACTTAAAGCAGAGGGACTTTGTATAGAAGGTTTGGGGGGCTGTGGGGAAGGAGTC $\verb|CCCTGAAGGTCTGACACGTCTGCCTACCCATTCGTGGTGATCAATTAAATGTAGGTATGAATAAGTTCGAAGCTC|\\$ CGTGAGTGAACCATCATATAAACGTGTAGTACAGCTGTTTGTCATAGGGCAGTTGGAAACGGCCTCCTAGGGAAA AGTTCATAGGGTCTCTTCAGGTTCTTAGTGTCACTTACCTAGATTTACAGCCTCACTTGAATGTGTCACTACTCA CAGTCTCTTTAATCTTCAGTTTTATCTTTAATCTCCTCTTTTATCTTGGACTGACATTTAGCGTAGCTAAGTGAA AAGGTCATAGCTGAGATTCCTGGTTCGGGTGTTACGCACACGTACTTAAATGAAAGCATGTGGCATGTTCATCGT ATAACACAATATGAATACAGGGCATGCATTTTGCAGCAGTGAGTCTCTTCAGAAAACCCTTTTCTACAGTTAGGG GCTCCTGGTCTTGAGATGTCTTCTCGTTAAGGAGTAGGGCCTTTTGGAGGTAAAGGTATA

698/2682 FIGURE 639

MMDQARSAFSNLFGGEPLSYTRFSLARQVDGDNSHVEMKLAVDEEENADNNTKANVTKPKRCSGSICYGTIAVIV
FFLIGFMIGYLGYCKGVEPKTECERLAGTESPVREEPGEDFPAARRLYWDDLKRKLSEKLDSTDFTSTIKLLNEN
SYVPREAGSQKDENLALYVENQFREFKLSKVWRDQHFVKIQVKDSAQNSVIIVDKNGRLVYLVENPGGYVAYSKA
ATVTGKLVHANFGTKKDFEDLYTPVNGSIVIVRAGKITFAEKVANAESLNAIGVLIYMDQTKFPIVNAELSFFGH
AHLGTGDPYTPGFPSFNHTQFPPSRSSGLPNIPVQTISRAAAEKLFGNMEGDCPSDWKTDSTCRMVTSESKNVKL
TVSNVLKEIKILNIFGVIKGFVEPDHYVVVGAQRDAWGPGAAKSGVGTALLLKLAQMFSDMVLKDGFQPSRSIIF
ASWSAGDFGSVGATEWLEGYLSSLHLKAFTYINLDKAVLGTSNFKVSASPLLYTLIEKTMQNVKHPVTGQFLYQD
SNWASKVEKLTLDNAAFPFLAYSGIPAVSFCFCEDTDYPYLGTTMDTYKELIERIPELNKVARAAAEVAGQFVIK
LTHDVELNLDYERYNSQLLSFVRDLNQYRADIKEMGLSLQWLYSARGDFFRATSRLTTDFGNAEKTDRFVMKKLN
DRVMRVEYHFLSPYVSPKESPFRHVFWGSGSHTLPALLENLKLRKQNNGAFNETLFRNQLALATWTIQGAANALS
GDVWDIDNEF

699/2682 FIGURE 640

CCCAGAGCAGCGCTCGCCACCTCCCCCGGCCTGGGCAGCGCTCGCCCGGGGAGTCCAGCGGTGTCCTGTGGAGC CCGGCCGCCGCGACGCGGGCATCACGTGCCCTCCCCCATGTCCGTGGAACACGCAGACATCTGGGTCAAGAG CTACAGCTTGTACTCCAGGGAGCGGTACATTTGTAACTCTGGTTTCAAGCGTAAAGCCGGCACGTCCAGCCTGAC GGAGTGCGTGTTGAACAAGGCCACGAATGTCGCCCACTGGACAACCCCCAGTCTCAAATGCATTAGAGACCCTGC CCTGGTTCACCAAAGGCCAGCGCCACCCTCCACAGTAACGACGGCAGGGGTGACCCCACAGCCAGAGAGCCTCTC CCCTTCTGGAAAAGAGCCCGCAGCTTCATCTCCCAGCTCAAACAACACAGCGGCCACAACAGCAGCTATTGTCCC GGGCTCCCAGCTGATGCCTTCAAAATCACCTTCCACAGGAACCACAGAGATAAGCAGTCATGAGTCCTCCCACGG CACCCCCTCTCAGACAACAGCCAAGAACTGGGAACTCACAGCATCCGCCTCCCACCAGCCGCCAGGTGTGTATCC ACAGGGCCACAGCGACACCACTGTGGCTATCTCCACGTCCACTGTCCTGCTGTGTGGGCTGAGCGCTGTGTCTCT CCTGGCATGCTACCTCAAGTCAAGGCAAACTCCCCCGCTGGCCAGCGTTGAAATGGAAGCCATGGAGGCTCTGCC GGTGACTTGGGGGACCAGCAGCAGAGATGAAGACTTGGAAAACTGCTCTCACCACCTA<u>TGA</u>AACTCGGGGAAACC AGCCCAGCTAAGTCCGGAGTGAAGGAGCCTCTCTGCTTTAGCTAAAGACGACTGAGAAGAGGTGCAAGGAAGCGG GCTCCAGGAGCAAGCTCACCAGGCCTCTCAGAAGTCCCAGCAGGATCTCACGGACTGCCGGGTCGGCCCTCCTG TTCCCAGGAGAGCCAAAGGCTTCTGAGCAGGATTTTTATTTCATTACAGTGTGAGCTGCCTGGAATACATGTGG TAATGAAATAAAAACCCTGCCCCGAATCTTCCGTCCCTCATCCTAACTTGCAGTTCACAGAGAAAAAGTGACATAC CCAAAGCTCTCTGTCAATTACAAGGCTTCTCCTGGCGTGGGAGACGTCTACAGGGAAGACACCAGCGTTTGGGCT TCTAACCACCCTGTCTCCAGCTGCTCTGCACACATGGACAGGGACCTGGGAAAGGTGGGAGAGATGCTGAGCCCA GCGAATCCTCTCCATTGAAGGATTCAGGAAGAAGAAAACTCAACTCAGTGCCATTTTACGAATATATGCGTTTAT ATTTATACTTCCTTGTCTATTATATCTATACATTATATATTATTTTGTATTTTGACATTGTACCTTGTATAAACAA AATAAAACATCTATTTTCAATATTTTTAAAATGCA

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MAPRRARGCRTLGLPALLLLLLLRPPATRGITCPPPMSVEHADIWVKSYSLYSRERYICNSGFKRKAGTSSLTEC VLNKATNVAHWTTPSLKCIRDPALVHQRPAPPSTVTTAGVTPQPESLSPSGKEPAASSPSSNNTAATTAAIVPGS QLMPSKSPSTGTTEISSHESSHGTPSQTTAKNWELTASASHQPPGVYPQGHSDTTVAISTSTVLLCGLSAVSLLA CYLKSRQTPPLASVEMEAMEALPVTWGTSSRDEDLENCSHHL

701/2682 FIGURE 642

AAACCACAGACAGACTTGCAAAAGAAGGCATGCACAGCTCAGCACTGCTCTGTTGCCTGGTCCTCCTGACTGGG GTGAGGGCCAGCCCAGGCCAGGGCACCCAGTCTGAGAACAGCTGCACCCACTTCCCAGGCAACCTGCCTAACATG TTAAAGGAGTCCTTGCTGGAGGACTTTAAGGGTTACCTGGGTTGCCAAGCCTTGTCTGAGATGATCCAGTTTTAC CTGGAGGAGGTGATGCCCCAAGCTGAGAACCAAGACCCAGACATCAAGGCGCATGTGAACTCCCTGGGGGAGAAC CTGAAGACCCTCAGGCTGAGGCTACGGCGCTGTCATCGATTTCTTCCCTGTGAAAACAAGAGCAAGGCCGTGGAG AACTACATAGAAGCCTACATGACAATGAAGATACGAAAC<u>TGA</u>GACATCAGGGTGGCGACTCTATAGACTCTAGGA CATAAATTAGAGGTCTCCAAAATCGGATCTGGGGCTCTGGGATAGCTGACCCAGCCCCTTGAGAAACCTTATTGT TTGGGGAGCCAACAGAAGCTTCCATTCCAAGCCTGACCACGCTTTCTAGCTGTTGAGCTGTTTTCCCTGACCTCC CTCTAATTTATCTTGTCTCTGGGGCTTGGGGCTTCCTAACTGCTACAAATACTCTTAGGAAGAGAAACCAGGGAGC CCCTTTGATGATTAATTCACCTTCCAGTGTCTCGGAGGGATTCCCCTAACCTCATTCCCCAACCACTTCATTCTT GAAAGCTGTGGCCAGCTTGTTATTTATAACAACCTAAATTTGGTTCTAGGCCGGGCGCGGTGGCTCACGCCTGTA ATCCCAGCACTTTGGGAGGCTGAGGCGGGTGGATCACTTGAGGTCAGGAGTTCCTAACCAGCCTGGTCAACATGG TGAAACCCCGTCTCTACTAAAAATACAAAAATTAGCCGGGCATGGTGGCGCGCACCTGTAATCCCAGCTACTTGG GAGGCTGAGGCAAGAGAATTGCTTGAACCCAGGAGATGGAAGTTGCAGTGAGCTGATATCATGCCCCTGTACTCC AGCCTGGGTGACAGAGCAAGACTCTGTCTCAAAAAAATAAAAATAAAATTAAATTTGGTTCTAATAGAACTCAGT ATAAATAAATGTATCTTATTCACATC

702/2682 FIGURE 643

MHSSALLCCLVLLTGVRASPGQGTQSENSCTHFPGNLPNMLRDLRDAFSRVKTFFQMKDQLDNLLLKESLLEDFK GYLGCQALSEMIQFYLEEVMPQAENQDPDIKAHVNSLGENLKTLRLRRCHRFLPCENKSKAVEQVKNAFNKLQ EKGIYKAMSEFDIFINYIEAYMTMKIRN

703/2682 FIGURE 644

CTGAAGCTTGCATGCCTGCAGGTCGACCCACGCGTCCGCGGACGCGTGGGCGGACGCGTGGGTTTTTCCTTTCTT GAGGGGAATGCTAAGAGGTGATTTTCAATGTTGGGACTCAAAGGTGAAGACACTGAAGGACAGAATTTTTGGCAG AGGAAGATCTTCTTCGGTCACCATACTTGAGTTAGCTCTAGGGAAGTGGAGGTTTCCATTTGGAATTCTATAGC TTCTTCCAGGTCATAGTGTCTGCCCCCCACCTTCCAGTATCTCCTGATATGCAGCATGAAAATGGCAAGTT CGACCATGAGTGCAGAGACCATGGAGCTGAAGTGGGTGAGTTCCAGCCTAAGGCAGGTGGTGAACGTGTATGCAG ATGGAAAGGAAGTGGAAGACAGGCAGAGTGCACCGTATCGAGGGAGAACTTCGATTCTGCGGGATGGCATCACTG CAGGGAAGGCTGCTCCCGAATACACAACGTCACAGCCTCTGACAGTGGAAAGTACTTGTGTTATTTCCAAGATG GTGACTTCTATGAAAAAGCCCTGGTGGAGCTGAAGGTTGCAGCACTGGGTTCTGATCTTCACGTTGATGTGAAGG ACAACAAGGGAGAGAACATCCCGACTGTGGAAGCACCTGTGGTTGCAGACGGAGTGGGCCTGTATGCAGTAGCAG CATCTGTGATCATGAGAGGCAGCTCTGGGGAGGTGTATCCTGTACCATCAGAAGTTCCCTCCTCGGCCTGGAAA AGACAGCCAGCATTTCCATCGCAGACCCCTTCTTCAGGAGCGCCCAGAGGTGGATCGCCGCCCTGGCACGGACCC TCAGAAAGAAAAAGGAGAGCAAGAGTTGAGAGAAATGGCATGGAGCACAATGAAGCAAGAACAAAGCACAAGAG AATGGAAAAAGGCCCTCTTCAAGCCTGCGGATGTGATTCTGGATCCAAAAACCAGCAAACCCCATCCTTGTTT CTGAGGACCAGAGGAGTGTGCAGCGTGCCAAGGAGCCCCAGGATCTGCCAGACAACCCTGAGAGATTTAATTGGC ATTATTGTGTTCTCGGCTGTGAGAGCTTCATATCAGGGAGACATTACTGGGAGGTGGAGGTAGGGGACAGGAAAG AGTGGCATATAGGGGTGTGCAGTAAGAATGTGCAGAGAAAAGGCTGGGTCAAAATGACACCTGAGAATGGATTCT ATATTCATACTTTCCTGGACGTCTCCTTCTCTGAGGCTCTATATCCTGTTTTCAGAATTTTGACCTTGGAGCCCA CGGCCCTGAGTATTTGTCCAGCG**TGA**AAAGAAGAAGAGTTCCTCCAATTCTGACCGAGTGCTGATCATTCCCT AGAGACACCAGTAACCCCGGGCTTAGCTAACGAAAGTGGGGAGCCTCAGGCTGAAGTAACTTTTCTCTGCTTCTC AAGCACTTTACTGATACTCATTCAATTATTCATATGACAGTTGTTTTGAGTTTTGGTACCATCTTATTTTCCCCTTA TACAGATAAGGAAACTGGGGTGCAGAAAAGTGAATTGACTACAAAGTAGACATGACTAGTTAACAACACAGCTGG GATCTAAACAGCAATAACTAACATTAATGGAGAACTTAAAATGCTCTGAGTGCTGTGTTATGAGCTTTGGTGGAT GTCACTCCTTTAATCCTCGCAACACCCTGTCGGGTAGTCTCATTTAGCAAGTATGGAAGTTGAGGCAGGGCAACA TTAAGCAACTTACATAACTCATGCAGTAATTTCTGCAGTTGGGAGATGTTCAGCTTCAGTCCCCGGCCCTATGGC CGTTCTTTTCCACCCTGTTTCTTCCCCCATAGGAAGAACCCACCTGTAGCCCTGAGGTTCTTTTCCCAGGATGGC TCCAGGATAAGGATCACTGTAGGTGGTTGTGGAGTTGACACCCCTGTTGACTCCTTCCCAGCTGATTGTCAGAGC CTTAGACCCAGCACGCCTTGGATTAGCTTTGCAGAGTGTCTTGGTTGAGAGAATAACCTCACCGTACCCACATGA CACGTGATTTGGAAAGAGACTAGAGGCCACACTTGATAAATCATGGGGAACAGATGTGTTCCACCCAACAAATGT TTACTCTGTTGCTAGGCTGGAGTGCAGTGGTGCGATCTCAGCTCCCTGCAACCTCCACCTCCTGGGTTCAAACAA TTCTCCTGCCTCAGCCTCCCGAGTACTGGGAATATAGGTGCACGCCACCACCACCAACAATTTTTGTACTTTTA CCAAAGTGCTGGGATTACAGGCTTGAGCCACCGGGTGACCGGCTTACAGGGATATTTTTAATCCCGTTATGGACT CTGTCTCCAGGAGAGGGGTCTATCCACCCCTGCTCATTGGTGGATGTTAAACCAATATTCCTTTCAACTGCTGCC TGCTAGGGAAAACTACTCCTCATTATCATCATTATTATTGCTCTCCACTGTATCCCCTCTACCTGGCATGTGCT AA

704/2682 FIGURE 645

MKMASFLAFLLLNFRVCLLLLQLLMPHSAQFSVLGPSGPILAMVGEDADLPCHLFPTMSAETMELKWVSSSLRQV VNVYADGKEVEDRQSAPYRGRTSILRDGITAGKAALRIHNVTASDSGKYLCYFQDGDFYEKALVELKVAALGSDL HVDVKGYKDGGIHLECRSTGWYPQPQIQWSNNKGENIPTVEAPVVADGVGLYAVAASVIMRGSSGEGVSCTIRSS LLGLEKTASISIADPFFRSAQRWIAALARTLPVLLLLLGGAGYFLWQQQEEKKTQFRKKKREQELREMAWSTMKQ EQSTRVKLLEELRWRSIQYASRGERHSAYNEWKKALFKPADVILDPKTANPILLVSEDQRSVQRAKEPQDLPDNP ERFNWHYCVLGCESFISGRHYWEVEVGDRKEWHIGVCSKNVQRKGWVKMTPENGFWTMGLTDGNKYRTLTEPRTN LKLPKPPKKVGVFLDYETGDISFYNAVDGSHIHTFLDVSFSEALYPVFRILTLEPTALSICPA

705/2682 FIGURE 646

706/2682 FIGURE 647

 ${\tt MFACAKLACTPSLIRAGSRVAYRPISASVLSRPEASRTGEGSTVFNGAQNGVSQLIQREFQTSAISRDIDTAAKFIGAGAATVGVAGSGAGIGTVFGSLIIGYARNPSLKQQLFSYAILGFALSEAMGLFCLMVAFLILFAM}$

707/2682 FIGURE 648

GGCACGAGGGGAGTGGAAAGTTCTCCGGCAGCCCTGAGATCTCAAGAGTGACATTTGTGAGACCAGCTAATTTGA CATAGTAGCCACTCTGTTGCTGGTCCTCAACTTTGAGAGGACAAGATCATTGCAGGATCCTTGTAGTAACTGCCC AGCTGGTACATTCTGTGATAATAACAGGAATCAGATTTGCAGTCCCTGTCCTCCAAATAGTTTCTCCAGCGCAGG CAATGCAGAGTGTGACTGCACTCCAGGGTTTCACTGCCTGGGGGCAGGATGCAGCATGTGTAACAGGATTGTAA ACAAGGTCAAGAACTGACAAAAAAAGGTTGTAAAGACTGTTGCTTTGGGACATTTAACGATCAGAAACGTGGCAT CTGTCGACCCTGGACAAACTGTTCTTTGGATGGAAAGTCTGTGCTTGTGAATGGGACGAAGGAGAGGACGTGGT CTGTGGACCATCTCCAGCCGACCTCTCTCCGGGAGCATCCTCTGTGACCCCGCCTGCCCCTGCGAGAGAGCCAGG ACACTCTCCGCAGATCATCTCCTTCTTTCTTGCGCTGACGTCGACTGCGTTGCTCTTCCTGCTGTTCTTCCTCAC GCTCCGTTTCTCTGTTGTTAAACGGGGCAGAAAGAAACTCCTGTATATATTCAAACAACCATTTATGAGACCAGT TGGAAGTCAATAGGGCTGTTGGGACTTTCTTGAAAAGAAGCAAGGAAATATGAGTCATCCGCTATCACAGCTTTC AAAAGCAAGAACACCATCCTACATAATACCCAGGATTCCCCCAACACACGTTCTTTTCTAAATGCCAATGAGTTG GCCTTTAAAAATGCACCACTTTTTTTTTTTTTTTGACAGGGTCTCACTCTGTCACCCAGGCTGGAGTGCAGTGGC ACCACCATGGCTCTCTGCAGCCTTGACCTCTGGGAGCTCAAGTGATCCTCCTGCCTCAGTCTCCTGAGTAGCTGG GTACAGGCTGGTCTCAAACTCCTAGGTTCACTTTGGCCTCCCAAAGTGCTGGGATTACAGACATGAACTGCCAGG AAAGCATTTTCTAGATACCACTTAACAGGTTTGAGCTAGTTTTTTTGAAATCCAAAGAAAATTATAGTTTAAATT CATATGACAATAAGCCACGAGGTGCAGTAAGTACCCGACTAAAGTTTCCGTGGGTTCTGTCATGTAACACGACAT GCTCCACCGTCAGGGGGGGAGTATGAGCAGAGTGCCTGAGTTTAGGGTCAAGGACAAAAAAACCTCAGGCCTGGAGG AAGTTTTGGAAAGAGTTCAAGTGTCTGTATATCCTATGGTCTTCTCCATCCTCACACCTTCTGCCTTTGTCCTGC TCCCTTTTAAGCCAGGTTACATTCTAAAAATTCTTAACTTTTAACATAATATTTTATACCAAAGCCAATAAATGA

708/2682 FIGURE 649

MGNSCYNIVATLLLVLNFERTRSLQDPCSNCPAGTFCDNNRNQICSPCPPNSFSAGGQRTCDICRQCKGVFRTR KECSSTSNAECDCTPGFHCLGAGCSMCEQDCKQGQELTKKGCKDCCFGTFNDQKRGICRPWTNCSLDGKSVLVNG TKERDVVCGPSPADLSPGASSVTPPAPAREPGHSPQIISFFLALTSTALLFLLFFLTLRFSVVKRGRKKLLYIFK QPFMRPVQTTQEEDGCSCRFPEEEEGGCEL

709/2682 FIGURE 650

GACCACGCGTATCGATGTCGACCCACAGGATTGTCACAGAGGGCAGGGTGGTGACTGAGGACCAGCTCCTCATGC $\tt TTGAGGCTGTGGTGATGCACCTCGGGATCCGCTCTGCCCGGTGTGTCCTGGGC{\color{red} ATG} GAGGGTCAGCAGGTCATCC$ TGCACCTGCCCCTATCCCAGAAGGGGCCCTTCTGGACATGGGAGCCTAGTGCCCCTCGAACTCTGCTCCAGGTCC TACAGGATCCAGCCCTGAAAGACCTCGTCCTCACCTGCCCCACCCTGCCCTGGCATTCCCTGATCCTGCGGCCCC AGTATGAGATCCAAGCCATCATGCACATGCGCAGGACCATTGTCAAGATCCCTTCTACCCTGGAGGTCGACGTGG AGGACGTCACCGCCTCCCCGGCACGTCCACTTTATCAAACCGCTGCTGAGCGAGGTCCTGGCCTGGGAAG GCCGCAAGGTGCCCAGGCACTTCCTGGTGTCAGGGGGGCTACCAAGGCAAGCTGCGGCGGCGGCCAAGGGAGTTCC CCCATGGGGCCCAGGGCAGTGACGTGGATGTCTTGGTTTGTCAGCGGCTGAGTGACCAGGCTGGGGAAGATGAGG AGGAAGAGTGCAAAGAGGAGGCAGAGACCCAGAGCGGGTCCTGCTGCCCTTCCACTTCCCTGGCAGTTTCGTGGA ${\tt GGAGA} {\color{red}{\bf TGA}} {\tt GTGACAGCCGGCGCTACAGCCTGGCAGATCTGACTGCCCAGTTTTCAATGCCTTGTGAGGTCAAGGT}$ GACTGTCGTGGAGGCCAAGGGGCAGCCAGACTTGCCAGAGGGGTCTCTCCCCATAGCCACAGTGGAGGAAGCTGG CAAGATTCCTGCCCACAGGAAGGGCCACAGGCCCGCTAAGCCCCAAAGGCAGGATCTAGATGATGATGAACATGA TTATGAAGAAATACTTGAGCAATTTCAGAAAACCATCTAAGTGCTGGAGGAACCACGCTTCCTAACTGCTGCTTC TCAGGGAATCCGACACCAGCCAACCATTTTAAGCCTCTAAAAGACCTCGGGCAAGTCTCACAGAAACTGAGCTGC CTTAGGGCGGGCTGGTTTGGACCTAACATCTCGCACGTGACTCCCTCAGCCTCAGAGCCTTGGGATGCAGAGCAG CTGGCAGGGTTCCTCTCAATCCTGCAACCCCAGCTGTCCCACCGGTGGATGCAGAGGGGAATCCGAGGCCATCAA CCTTGGTGACAGCAGCGCAGTGCCAATGCTGATCACACTGCATGGGAGATTTTGTTAACGTCTGCCACCCCACT CTCACCCCAAGCTCTAAGCCCCCGGGAGGCCTGGACTGTCTTCCTCATCTCTGTAGCACCAAGCCTGATAGATC TGTATATGGTAAACAGGGGTTTAACCACATGTGGTTAACATGGATTAATGTGGGAATTTGGCTTCAAGAACACAA CCTTAGGACCTTGGGCCCCAAAAGCTGGTGGTGAAATGAGAGGGGCCAATTTAAGAAGACCCTTATGGAGACCTG AGGCTGCAGAAACTGGTAGGTTTCATCAGGTGGTTAAAGTCGTCAAAGTTGTAAGTGACTAACCAAGATTATTTC ATTTTAAAACCACAGAATAAAAATGACACCTGAGCTTCTCC

710/2682 FIGURE 651

MEGQQVILHLPLSQKGPFWTWEPSAPRTLLQVLQDPALKDLVLTCPTLPWHSLILRPQYEIQAIMHMRRTIVKIP STLEVDVEDVTASSRHVHFIKPLLLSEVLAWEGPFPLSMEILEVPEGRPIFLSPWVGSLQKGQRLCVYGLASPPW RVLASSKGRKVPRHFLVSGGYQGKLRRPREFPTAYDLLGAFQPGRPLRVVATKDCEGEREENPEFTSLAVGDRL EVLGPGQAHGAQGSDVDVLVCQRLSDQAGEDEEEECKEEAETQSGSCCPSTSLAVSWRR

711/2682 FIGURE 652

712/2682 FIGURE 653

MTLEELVACDNAAQKMQTVTAAVEELLVAAQRQDRLTVGVYESAKLMNVDPDSVVLCLLAIDEEEEDDIALQIHF TLIQSFCCDNDINIVRVSGNARLAQLLGEPAETQGTTEARDLHCLPFLQNPHTDAWKSHGLVEVASYCEESRGNN QWVPYISLQER

713/2682 FIGURE 654

 ${\tt CCCAGCTCCCTGAAACAACAGTAACCTACCCCTGTGGGTCATCATC{\tt ATG}{\tt CCTCCGACCTGGCCAAGAAGAAGACGCC}}$ AGCCAAAAAGAAGGAGGCTGCCAAAGCTCGACAGCGGCCCAGAAAAGGACATGAAGAAAATGGAGATGTTGTCAC AGAACCACAGGTGGCAGAGAAGAATGAGGCCAATGGCAGAGAGCCACAGAAGTAGATTTGCTGACCAAGGAGCT AGAGGACTTTGAGATGAAGAAAGCTGCTGCTCGAGCTGTCACTGGCGTCCTGGCCTCTCACCCCAACAGTACTGA TGTTCACATCATCAACCTCTCACCTTTCATGGTCAAGAGCTGCTCAGTGACACCAAACTGGAATTAAACTC AGGCCGTCGTTATGGCCTCATTGGTTTAAATGGAATTGGAAAGTCCATGCTGCTCTCTGCTATTGGGAAGCGTGA AGTGCCCATCCCTGAGCACATCGACATCTACCATCTGACTCGAGAGATGCCCCCTAGTGACAAGACACCCTTGCA GTGTGAGAAGCTCATGGAGCTCTACGAGCGCCTGGAGGAGCTGGATGCCGACAAGGCAGAGATGAGGGCCTCGCG GATCTTGCATGGACTGGGTTTCACACCTGCCATGCAGCGCAAGAAGCTAAAAGACTTCAGTGGGGGCTGGAGGAT $\verb|CCTAGATGCTTGCGTGTGGAAGAAGAACTAAAAACTTTTAAGCGCATCTTGGTCCTCGTCTCCCATTCCCA|$ GGATTTTCTGAATGGTGTCTGTACCAATATCATTCACATGCACAACAAGAAACTGAAGTATTATACGGGTAATTA TGATCAGTATGTGAAGACGCGGCTAGAGCTGGAGGAGAACCAGATGAAGAGGTTTCACTGGGAGCAAGATCAGAT TGCACACATGAAGAACTACATTGCGAGGTTTGGTCATGGCAGTGCCAAGCTGGCCCGGCAGGCCCAGAGCAAGGA GAAGACGCTACAGAAAATGATGGCATCAGGACTGACAGAGAGGGTCGTGAGCGATAAGACACTGTCATTTTATTT CCCACCATGTGGCAAGATCCCTCCACCTGTCATTATGGTGCAAAATGTGAGCTTCAAGTATACAAAAGATGGGCC TTGCATCTACAATAATCTAGAATTTGGAATTGACCTTGACACGAGTGGCTCTGGTAGGGCCCAATGGAGCAGG GAAGTCAACTCTTCTGAAGCTGCTAACTGGAGAGCTACTACCCACAGATGGCATGATCCGAAAACACTCTCATGT CAAGATAGGGCGTTACCATCAGCATTTACAAGAGCAGCTGGACTTAGATCTCTCACCTTTGGAGTACATGATGAA GTGCTACCCAGAGATCAAGGAGAAGGAAGAAATGAGGAAGATCATTGGGCGATACGGTCTCACTGGGAAACAACA CCACATGCTCTTCCTGGATGAACCCACCAATCACCTGGATATCGAGACCATCGACGCCCTGGCAGATGCCATCAA TGAGTTTGAGGGTGGTATGATGCTGGTCAGCCATGACTTCAGACTCATTCAGCAGGTTGCACAGGAAATTTGGGT CTGTGAGAAGCAGACAATCACCAAGTGGCCTGGAGACATCCTGGCTTACAAGGAGCACCTCAAGTCCAAGCTGGT GGATGAGGAGCCCCAGCTCACCAAGAGGACCCACAACGTGTGCACCCTGACATTGGCATCTCTGCCAAGGCCA**TG** ${f a}$ GCATCATGAACTCGTTTGTAAACGACGTGTTTGAGCAGCTGGCGTGTGAGGCTGCCCGGCTGGCCCAGTACTCG GGCCGGACCACCCTGACATCCCGAGAAGTCCAGACGGCTGTGCGTCTGCTGCTGCCTGGGGAGCTGGCCAAGCAC GCTGTGTCTGAGGGCACCAAGGCTGTCACCAAGTACACCAGGTGACCAGGGCCTGACAAAAATAAAGG GTGAACTGTTAAAAAAAAAAAAA

714/2682 FIGURE 655

MPSDLAKKKAAKKKEAAKARQRPRKGHEENGDVVTEPQVAEKNEANGRETTEVDLLTKELEDFEMKKAAARAVTG VLASHPNSTDVHIINLSLTFHGQELLSDTKLELNSGRRYGLIGLNGIGKSMLLSAIGKREVPIPEHIDIYHLTRE MPPSDKTPLHCVMEVDTERAMLEKEAERLAHEDAECEKLMELYERLEELDADKAEMRASRILHGLGFTPAMQRKK LKDFSGGWRMRVALARALFIRPFMLLDEPTNHLDLDACVWLEEELKTFKRILVLVSHSQDFLNGVCTNIIHMHN KKLKYYTGNYDQYVKTRLELEENQMKRFHWEQDQIAHMKNYIARFGHGSAKLARQAQSKEKTLQKMMASGLTERV VSDKTLSFYFPPCGKIPPPVIMVQNVSFKYTKDGPCIYNNLEFGIDLDTRVALVGPNGAGKSTLLKLLTGELLPT DGMIRKHSHVKIGRYHQHLQEQLDLDLSPLEYMMKCYPEIKEKEEMRKIIGRYGLTGKQQVSPIRNLSDGQKCRV CLAWLAWQNPHMLFLDEPTNHLDIETIDALADAINEFEGGMMLVSHDFRLIQQVAQEIWVCEKQTITKWPGDILA YKEHLKSKLVDEEPQLTKRTHNVCTLTLASLPRP

715/2682 FIGURE 656A

CACCAGGTGAATGGCTAAAGAATCTGGAATAAGCTTGAAAGAATACAGGTCCTGGCAAGGCAATGGAAAGTTGG CATGCCACCCTCCCACCAATAAATCCTGGAGGACCGAGGCCAGTGTCCTTCACTCCTACTGCATTAAGCAATGG CATCAACCATTCTCCTCCTACCCTGAATGGTGCCCCATCACCGCCACAGAGATTCAGCAATGGTCCTGCCTCCTC CACATCATCTGCACTCACAAATCAGCAATTGCCAGCCACTTGTGGTGCTCGACAACTCAGCAAGTTGAAACGCTT TCTTACCACTCTGCAACAGTTTGGCAATGACATCTCCCCTGAGATTGGGGAGAAGGTGCGGACTCTTGTTCTTGC ACTGGTGAACTCAACAGTGACAATTGAGGAATTCCACTGTAAGCTCCAAGAAGCCACAAACTTTCCCCTTCGTCC TTTTGTGATTCCATTTCTCAAGGCCAACCTGCCCCTGCTGCAGCGGGAACTGCTGCACTGCGCTCGGGCGGCCAA GCAGACCCCATCCCAGTACCTGGCTCAGCACGAACACCTTCTGCTCAACACAAGCATTGCATCGCCTGCTGACTC TAGAGACACAATTGCTCCTGAGCCTCCTGCCAAGAGAGTATGTACCATCAGCCCTGCTCCTCGGCACAGTCCTGC TCTCACTGTGCCCCTCATGAATCCCGGGGGCCAATTCCATCCTACCCCTCCACCTCTTCAGCATTACACCTTAGA GGATATTGCAACTTCTCACCTGTATCGGGAACCCAACAAGATGCTAGAGCATCGAGAAGTTCGTGATAGACACCA CAGTCTTGGTCTAAATGGAGGCTATCAAGATGAGTTGGTAGATCATCGTTTGACAGAAAGGGAATGGGCTGATGA ATGGAAACATCTTGACCATGCGCTGAATTGCATTATGGAAATGGTAGAGAAAACAAGGCGCTCTATGGCAGTTCT GCGGCGCTGTCAGGAATCAGATCGTGAAGAACTCAACTACTGGAAAAGACGGTACAATGAAAAACACAGAGCTGAG GAAAACGGGGACCGAGTTGGTCTCCAGGCAGCACAGCCCTGGGAGTGCAGATTCTCTCAGCAATGATTCTCAGAG AGAGTTCAACAGCAGGCCAGGTACAGGATACGTACCTGTGGAGTTTTTGGAAAAAAACAGAAGAAGCTGTGAATAA GGTGAAAATTCAGGCCATGTCAGAAGTACAGAAGGCCGTCGCTGAGGCAGAGCAGAAAGCCTTTGAAGTGATTGC AACAGAGAGCACGAATGGAGCAAACCATAGCGGATGTCAAGCGGCAGGCCGCAGAGGATGCTTTCCTCGTCAT CAATGAGCAAGAGGAGTCCACGGAGAACTGCTGGAACTGTGGCCGCAAAGCCAGCGAGACATGCAGTGGCTGCAA TATCGCGCGATACTGTGGCTCTTTCTGCCAGCACAAGGACTGGGAGCGGCACCACCGCCTCTGTGGTCAGAACCT GCATGGCCAGAGCCCCACGGCCAGGGCCGGCCGCTGCTTCCTGTAGGCAGGGGCTCCTCTGCCAGGTCCGCCGA CTGCAGCGTGCCCAGCCCAGCCCTCGACAAGACCTCGGCAACCACATCGCGTTCCTCAACACCTGCTTCTGTGAC AGCTATCGACACCAACGGACTCTGAGCCCCGGACTCTGCTTACCCTGATGGCTGCTCAGCACCACAGAGTGCTTG GGCTGAGGGACTGACTGTTGGAACCCGTGCATGTAGCTGCCGGGTCATCAGCAAGAAATGAATTGGAGGCAGGAA GAGTCCAAGCCTGAATAATAACACCCCACAGCCTCTCTGTGCACTTGCTGTCTGCGGAGCCAGTGTGCCATTCTC TGCACATGGGCAGCCAGCCTGAGCTGCCTCCTCCATGGCTTTCCTGGTTTGTTCCTCTCTCCACTGAAGCTGACT TAGCCGGCCCTTTTCAGTGTAGACCACCAGCTCCCCTCCCCATCTCCTTGAGTCAGCAGACTGTCCAATGTGCT ACCCCTGAATAGCTCCTTCGGCCCCATCTCCATCCTCAGCAGATGACACTGATTGGCCTCACGGGGACTTGGGTA AGCAACAGGCGGCATTCAGGACTCTTCTCAACCCTGCTGTTCAGACTTGATAAGATCTCAGAGTCCACAGGAAAG AAGTCACTGTTGCAATAAAAGCACCCGTAGTAGCAAAAACATAAACAAATAAAACTTCCCCCACATCACAGATGA GAGCATGTTGGCCAACTAGTATCGTCAAATTATTGAGTGGATCATCTCTTGGAAATGCAGAACTTCTGCCACCAC TTGGCTATTTGCACAGTCATCTTGTTCTGTGTCCTTTTATCTCTCAGACCACACACCTCTGGAACGCTGTGGGCA TCTTCTGCCCATGGGCTCCATTTGGCACCTGCTGAGCCACAGTTGTCCTGCTGGATGTGCTGTGCAGGTTGGTAG GACTTGCCCCCACTGTCAAGGCCTGGTCTCATCTGAAAAGCCCTCCTGGACCTCAAAGAATTCTTCAGACCTCAT AGTTACAGGTCATTATATCTACTATGTTGATTTATCATCAGGCACACACTTCTGTTTTCCTTCTTGTGTTATC TGATAGCGTCCCTCCTTGAGCTCATCAGAAAGGTTTTATGAAATGTGAACCATTTTGGGAAAAGCTGATCAATTT TTCTTCCTAGCTTCCCATTTTCAAATGGGACATCACTCATATCCCTTTCAGAATGTTAGGAACTGCCTCCCACAT AACTCTGTCTCAAAAAAAAAAAAAAAAGGCAAAATTAAAGAATTTCAAGTCCCTAATTTACTCTAACCAAGCAT TTTCAGTCTTACAAAGAAATCTAGTGCACGACACCTTTAAAATGCCTAGATTTCCATTGCCTAAAAGTAAGGTGTG ACCAGTGAAACAACAGCAGAGAATCATGTTCCTTTGCTGTGGAACACATAAGCCCCACAGTTTTCCAGTCAGCCT AATACATGGGTATCCCCCGACCCCATCTGCCTCCTTAAGCCACAGTCCTTGGTGGGGAACTCTAAGGGGGACGGA GTCAGTACCCCGGACAGGGCCACATTTGCATGAGACATGGCTGTCTCACAGGTCACAGAGCCATTACAACAGCTT

716/2682 FIGURE 656B

TGAGACGGGAGTTTCTCTCTTGTCTCCCAGGCTGGAGTGCAATCGCGCAATCTCGGCTCACGGTAACCTCTGCCT CCCAGGTTCGGGCGAGTCTCCTGCCTCAGCCTTCTGAGTAGCTGGGATTGCAGGCATGCGCCCACCCCCAACT GATTTTGTATTTTTAGTGGAGACGGGGTTTCTCCTTGTTGGTCAGGCTGGTCTCAAACCCCGGACCTCAGGTGAT CCCCCACCTTGGCCTCCCAAAGTGCCAGGATTACAGGCATGAGCCACTGTGTCCGGTCTTGAGCAGGTTTTTAA AATCTCCAGTGGCCATAAAACTAGCCAGGGTAGCTCATGCTTTTACTGGTTGGAATAAGGAGCCAAAACCAACAA AATAATATTTATTAGGGTTGGATGCCCATTTCTGTGGTTAAGGCTTAGGTTTGGTGTGCAGAGCCTGGCCTGCTC TTGTGGGCTGTGGTTGCTGACAGTTTCGTTTTCTGAATCTTTGTAATGCTCTTCCACCCTGCTCGTGCTGCCC AGAGGCTGATCTGCAAACCTGGGCAGTATTCCACACTGAAGCTCAGTTTGCAAACCTTCTGCTGTTTAATTCTG GTCAGTTTCACACAGAAGTCACGAGGGCCTCTGCCCAGGACCTTCTATTCACATTTCAAGAATCCCTTTCTGAAA TTCTCCAACTCTCTGGTCAGGAGGAGGAGCACCATTGGGGCGGGGTAGGCAGCTAGAGGCGCAGGAGCGAATCCA GGTTCCTTGCGTGGTTCCCAGCCTCTGCTGACAGCACCTCAGCTACCAGGTGGGGAGTGGAAATTCAGCCTGCTT AGAGGACTGACCTCTACAGTTCATATTTGCAGTGACATAAAAGGCAAAGAGGAGCTGGCATGGTGGTACAGAAGG TATCAGTCAAGCGCAGGCTCTTCAGAAACCTAGAAACTAAAAAGAGATGCAACATGTGACTGGCCATCAGCCAGA CATGTCTAGGGTGAGACCAGTGCTCAGCACCACCCGCCAAGGAACACTGATGAGTTGTGGGACATTATGGTCGGC CAAGTGAGGAATGATTGCAGGGACCAGAGAAGACCAAAGATGCCAGAGTTTCTTGAGGGCTGGGT TTCACGTCTTTGCCTGTCCTTTTTGTCCCCACTTGCCTGCACCGTGCCTGACTCATCCAGTGGGGAAGGTGACTC AAGAAGTTGTTTAAGCCTAGGCCTAGGCAGTCCACTTCGGGAGGTGGGGGCACTCCACACTGGGGGGCCCTGCAG $\tt CTCCAGGGCTGGTGCTCTAGCAGATCCGCTCAGGCACGGTTGGGTGACCGTGGGGTCACCGATTGCGTAGATTAT$ TTCTAGGGCAGTGCTGGGTTAGAAATGTCTGTCTGGAAACAGGACACATCTTGCCACCACAAGTCCACACCTGGC CTTGGCTGCCCCCCTCTCTGCAGCGTGGATTTCCTTTGCCCATTTGGGCCAGAAGGTCACCAGGAGTTCATCA AGTTAGTAAGCCTCGGCTTGTCACCTGCTTGCAAAGGGTATAGACATCATTCTGGGTAGTTCTAGAGGATATCGC AACAAGTGCGTTTGAAGGTTCAGCACAGCTGGAATTGTACGGTAGTGAGCTCTTCAAAATGAAAACAGAATGACC GGATGGCCATCTGTCCTGGAAACTGTAGAATTGAATAAATCACTGAAAATAGAACACTTCTTGGAGGCTTTCTTC AAGCTGTTTGCAGAAAACTGGGTGGTAGCGTGTCTGAACCAAACGGAAGAATAGCCAGCGGAGCATGGACTGTTC CAGCACGGGCCAGATGGCCAGCTGTCGAGAGCAGCCCTGCCCAGATTGCGGTGGGGGCTGTGCCAGCGGCTCCGC AGGGCCCTTCCAACTCTGGAGTGTCTGTAGTTCTTGTGAAACCAAAACGTTGACTACCTGCCTCTTTCCTCGGGC ATCGACGTGCTCATTTCCAAAGATGATGGTGCAGGTGACCTTTTCCATCGTGAGCTAAGAGAAGGTTAGGAGGCC TGAGGGGGGGCCTTGTGTCCCCTCCTCCCCCTCCACAGCCCCTGAGGTGGAGCTTCCCTCACAGACCCCATCTG GTCGAGCCTACGGCTGCCCAGTGTACACTCAGTGATGCTTATACCAAATAGGGCATGTGCGCTGGTGTCTGTTGG GGACAGCCCCATCCCTACCTTGGAGTCGGCAGAGAAGCAGCAATAAGCATTAGGCGAATGATTGAAAGGGCTGCT GCGCCAAGAGGCCTTCAGTCCCCTTAACGTGGCTTTCCAACTTCCTGACGAGGCTACAAAAGGCTCCGCTCACAAA AGAAAGCCAATAATGTAAATAAATAGAAAACGAAGCCTCCACGCGTGGTTTTTAAAGGGGGGATGATGAATGTGAC ACCACCACAGAATGCATTAGAATCTGGTTTTTCTGTGCTTTTGTCATTTTACTCTGATAGGAATTTTTGTTACCT AACTCTGTGCATAACTTATTTAATGTACTGTATAAATGAACCAAAACTGTTAAATATGTATTTAGTTTGTTCTAC TTAAAGTAGTCAATAAAAAGGCTATATTCCT

717/2682 FIGURE 657

MAKESGISLKEIQVLARQWKVGPEKRVPAMPGSPVEVKIQSRSSPPTMPPLPPINPGGPRPVSFTPTALSNGINH SPPTLNGAPSPPQRFSNGPASSTSSALTNQQLPATCGARQLSKLKRFLTTLQQFGNDISPEIGEKVRTLVLALVN STVTIEEFHCKLQEATNFPLRPFVIPFLKANLPLLQRELLHCARAAKQTPSQYLAQHEHLLLNTSIASPADSSEL LMEVHGNGKRPSPERREENSFDRDTIAPEPPAKRVCTISPAPRHSPALTVPLMNPGGQFHPTPPPLQHYTLEDIA TSHLYREPNKMLEHREVRDRHHSLGLNGGYQDELVDHRLTEREWADEWKHLDHALNCIMEMVEKTRRSMAVLRRC QESDREELNYWKRRYNENTELRKTGTELVSRQHSPGSADSLSNDSQREFNSRPGTGYVPVEFWKKTEEAVNKVKI QAMSEVQKAVAEAEQKAFEVIATERARMEQTIADVKRQAAEDAFLVINEQEESTENCWNCGRKASETCSGCNIAR YCGSFCQHKDWERHHRLCGQNLHGQSPHGQGRPLLPVGRGSSARSADCSVPSPALDKTSATTSRSSTPASVTAID TNGL

718/2682 FIGURE 658

GAATTCGGCCAAAGAGGCCTATGCTTCTCTGAAGACTTGCAGCAAGGCTTGCTGAGGCTCACAGAAGATAGCCCC GGAATTATTGGAAGTTGTTTTGCAACCTGGGCTTTTATACAGAAGAATACGAATCACAGGTGTGTGAGCATCTAC TTAATTAATTTGCTTACAGCCGATTTCCTGCTTACTCTGGCATTACCAGTGAAAATTGTTGTTGACTTGGGTGTG CCCGGATTTGCCAAAATGATATCAACCGTTGTGTGGCTAATGGTCCTTCTTATAATGGTGCCAAATATGATGATT TTGCTGACAAATTTCATATGTGTAGCAATATTTTTAAATTTCTCAGCCATCATTTTAATATCCAATTGCCTTGTA ATTCGACAGCTCTACAGAAACAAAGATAATGAAAATTACCCAAATGTGAAAAAGGCTCTCATCAACATACTTTTA CTGTGCTTTGATCCTGTACTATCACCTCTCAAAAGCATTCCGCTCAAAGGTCACTGAGACTTTTGCCTCA CCTANAGAGACCAAGGCTCAGAAAGAAAATTAAGATGTGAAAATAATGCA**TAA**AAGACAGGATTTTTTGTGCTA

719/2682 FIGURE 659

MTNSSFFCPVYKDLEPFTYFFYLVFLVGIIGSCFATWAFIQKNTNHRCVSIYLINLLTADFLLTLALPVKIVVDL GVAPWKLKIFHCQVTACLIYINMYLSIIFLAFVSIDRCLQLTHSCKIYRIQEPGFAKMISTVVWLMVLLIMVPNM MIPIKDIKEKSNVGCMEFKKEFGRNWHLLTNFICVAIFLNFSAIILISNCLVIRQLYRNKDNENYPNVKKALINI LLVTTGYIICFVPYHIVRIPYTLSQTEVITDCSTRISLFKAKEATLLLAVSNLCFDPILYYHLSKAFRSKVTETF ASPKETKAQKEKLRCENNA

720/2682 FIGURE 660A

TTGAGGTGCATTGAAATGTTCCAAGCTGTTACTTACCTTAACATGTTCTTGAGGTACCATGGCATGGATTAAAAG GAAATTTGGTAAGTGGCCTCCACTTAAACGACTTACTAGGGAAGCTATGTGAAATTATTTAAAAAGGGCGAGGGGA TCAAATAGTACTTATCCTTCATGCAAAAGTTGTACAGAAGTCATATGGAATGAAAAAGGTTTTTTGCCCTCCCCC CTATTGCACAGCCAAAACATTGTACATATCTGATTCAGACAAGCAAAAGCACTTCATGTTGTCTGTAAAGGTGTT CTATGGCAACGGTGATGACATTGGTGTTCCTCAGCAAGTCGTCCAAAACCTTCCAAAAAGAAGCAGTCATTGAA AAATGCTGACTTATGCATTGGCTCAGGAACAAAGGTGGCTCTGTTTAATCGACTACGATCCCAGACAGTTAGTAC CAGATACTTGCATGTAGAAGGAGGGAATTTTCATGCCAGTTCACAGCAGTGGGGAGCATTTACATTATTCTTGGA GTGCTCAGTTACTGGCATGGCACTCCCAAGATTGATAATTAGGAAAGTTGATAAGCAGACCACATTATTGGATGC TCAAGAAAGAATAATTCAATTTCAGGCCACTCCATGCCCAACAGAACCAAATAAAGAGATGATAAATGATGGTGC TTCCTGGGCAATCATTAGCACACATAAGGCGAAGTATACATTTTATGAGAGAATGGGCCCTGTCCTTGCCCTGGT CATGCCTATGCCTGTCGTAGAGAGCCTTAAGTTGAATGGCGGTGGGGACGAAGCAATGCTTGAACTTACAGGACA GAATTTCACTCCAAATTTACGAGTGTGGTTTGGGGATGTAGAAGCTGAAACTATGTACAGGTGTGGAGAGAGTAT GCTCCGTGTTGTCCCAGACGTTCTGCATTCTGAGAAGGTTGGAGATAGTTCCCAGCAACCAGTCCAGGTTTCAGT AACTTTGGTCCGAAATGATGGAATCATATATTCCACCAGCCTTACCTTTACCTACACACCAGAAGCAGGGCCGCG GCCACATTGCAGTGTAGCAGGCGCAATCCTTAAGGCCAGTTCAAGCCACGTGCCCCCTAATGAATTAAACACAAA ${\tt CAGCGATGGAAGTTACACAAATGCCAGCACAAATTCAACCAGTGTCACATCATCTACACCAACAGTGGTATCC} {\bf TG}$ CAGTCTTTTGTGGTTTATTGGGAAACTTTTCATACCAGGTGATACTATTCTAAAACCCCGTTGTCTCCCTGCAAG GACAAGAAGTAAATAATGTGGCTGGAATACAAGTTGAACAAACTAGAAGACAAATCTAACATAGTTTTTATGG ACCAAGGAACTTGTATATTGTATAAGCTTTAGTAAAAGGTACATTTTCACCATACCTTTTTTTATATCACGGTAT TATAGTACACCTTGTTACCAATAGGTTGTTCTCTTCCCCACCCTCCTTTGAGCTTTGCTCTAAAATACATTCTGG TTTCTTTTTTTTCAGCTGAAGTCTTATGACTTTTTCATGAGTCAAAATTGTTTGGATTTCACGAAGTCAAATCT TGCAAAGGCCTGCATATTTTTTTTAAGATTATATGAAGTCTGTGCAAAAAGCTTTAAAAAATTGCCTCTGCCTTG CCTGCATACATGCAATGTATGTAACTTAGTCTCTCTCTCAGACACTGTTGGGTAGTTATTTCTGTGTTTTCTTT TTTTAAAAAAAAATATGGACTTATTGTGGTTTATCTGAGAGGTTCTAACATTCACATGCAATTTGGTGTGGCATT TAGCTATTATGAGTTATTGGCGCGAACTTGTTTGATATTTGAAGTGTCTCTCCCCTTTTCCCATGACGTAATACA TAGGTGTGTTCCAGGATTTGTTCAGGTTTTTCCCCCCCTCCTAATCTTGTACATAACTTGTATTTTGTGTAAGTT CAAAAAATATGGGAAGTATTTGCTACCAGTTGTTAGATGGTGCCCCTTATTGGTAGAATCAGGAAAATGTCCGCA AAAGCATGTTTTATTATCTTTACTTTTTTGGGGGGTTGGAGGGGGTAGCCTAGCCAGACATCATGTAATCTTAAA GGGTTGTAGGTTGGCCTTGCTTAACCCGCCGGTTTTACCGTGCTTTATTCCTGAACTTTGTTTATGCCTTTG TTTGGTTCTTCTGAAATTGCAGCAGACTCATTGGGCTACATTTAGTACAGGAACCACGTGTGTAATGTTATACAA CACAGTCAGTAATACAATCATCCCTCTTAGAGTAAAAACTACCTCTAGATTGTGTAAGCTTTTTACTGTCCATAA AACAGGAGCCACAGTACCTTATGAATGCAAAACTGTAACTTCCTACAGTGTTTCCCCACAGAACATTGTCTTTCT GGTGTCTGGGCTGTTTTTGAAAAAGTTTCCATTAATAGACTTTTTAGAAATTATTATTAGTAGCATTTTTTTCC AGCTTTGCGTCTTCATCACTCACTCAAGTGTCAGACTATGCACTGTAAATATCTTCCTAACATCTTTAAATCGCC TTTTCCTCAGTTTTCAAGGGGAAGGTCATTTGTAAAGCACGTTAGGTGGTTAAATCAGTTATTGCGGTTTTCTCT TACAGCAAGCCTTTTTAATCACCCCCAGGCTGCATTTTATTCTATATCGCCTTTTTTCTTCAAATCTGCTCCAAT

721/2682 FIGURE 660B

CATCCACTTCTCTTTATAAGCTATTCCTGCCTCACACCTAAATCTGTTTCAGTGATCAAGGGCAGAACTCATTG $\tt CTCCCTATGGAGTCATGGCAGGAATCATTACACAGTGCTTTTGTTCAGAGCATGGACATGTTCCAGGTGCTGCTT$ TGCTTTAACGGCCACAAGTTTCCTCCACTTCTCAGGTTTTGGTATTTAGTAAGGAATCAATTAAACTAACCAATAA CAAAAGAGATACTTTTGAAGAACAAACTATTCTTTACCCATTTTGTAGCTCAAAAATAATTTTTCAAGTTCATGA TATTTTTGGCCATTCTCATACCACAGACAAAAGAGTGAATGATTGTCATTGTAGCTTATTGTTTATCAGTAGTTC TTTTGTAGCTGCTTACATTTTTTCTTTCATGGTTTGTGAATCATTTCAGTATGTAATTTATAGGAACCTTGTCCT CTGGTATAGTAGACTGTGTGCCCTCCTCCAGGATGGCATTATTAGACATGCTGGTCATTTACCCTCAGAAAGACT CTCTTATAGAATGGTGAGTGCTTCAGTTATAGTATGTTTGAATTTTAAAAAATTCCTGTTTAGAATGTATCTATG CTCTCATGACTATGCAGTTTCTAACATACACATAGAAGCTGAGTCTCTGATCCAATATGTTTTTATTTGTTCCAT TAATTTATCACATAGATTGGGAAGGCAAGCTAAAAAGCCTTAAAAATGCCCTTTATATTTTTGAGTGATTTCAGCGT TGAACACAGTATACTATCTAAATTTGCTGCTCACTTTCTTAAACTGTTGCAATTAAAGGCCATGTTTATACATGAC TGTTTTATTGTTTTTAATGAATCTGGTACCATCTGTGCTTTCACAAAAAACTTCCAATGCCATTTTTGAGAACTA ACCTAACAGTCATGCTAACCAGAAAATCCACTGGGGAGGAGGTTCCTTTGAAACAAAATGCTGTTCAGTTAGTAA CCAAGTTACTTTGATTGCAAAAGCAGCTGTGTTTCTGATAAGTACTGAACAAATGTGTGTAATTTTCTGTGCCAG CCCTTTCAGGACTCAACTGTATCTCCTTTTGTTAATTTTCCCCTGTGTTGTGATAAATTGTTTGCCAGCATTCAG TACTGTGTTGGTGCAGATGAGGTTTATATCTCATTTTAGCTTATTTCTTGTACCTTTCAGCATGCCTACGCATTC AGTCCTTAAGGGGTTTATTTTACAAACTGTGCGCCTGAAGTTTATTAGCAATAAGATAGAAAATGAGCAAGTTTA TACCATAATTTTGAGAAAAAAAGAATCTGCTCAGTTCCATATTTCATCCGTGAAAAACTTGCAATACGAGCAGTT TCAAGGAATAAATAAAAAGGAAATGAAACCATTGT

722/2682 FIGURE 661

MGSGWKKIKLQMKCDGCSEQGSHPCAFIGIGNSDQEMQQLNLEGKNYCTAKTLYISDSDKQKHFMLSVKVFYGNG
DDIGVFLSKSSKPSKKKQSLKNADLCIGSGTKVALFNRLRSQTVSTRYLHVEGGNFHASSQQWGAFTLFLDDDGS
EGEEFTVRDGYIHYGQTVKLVCSVTGMALPRLIIRKVDKQTTLLDADDPVSQLHKCAFDLEDTERMYLCLSQERI
IQFQATPCPTEPNKEMINDGASWAIISTHKAKYTFYERMGPVLALVMPMPVVESLKLNGGGDEAMLELTGQNFTP
NLRVWFGDVEAETMYRCGESMLRVVPDVLHSEKVGDSSQQPVQVSVTLVRNDGIIYSTSLTFTYTPEAGPRPHCS
VAGAILKASSSHVPPNELNTNSDGSYTNASTNSTSVTSSTPTVVS

723/2682 FIGURE 662

724/2682 FIGURE 663

MSSMNPEYDYLFKLLLIGDSGVGKSCLLLRFADDTYTESYISTIGVDFKIRTIELDGKTIKLQIWDTAGQERFRT ITSSYYRGAHGIIVVYDVTDQESFNNVKQWLQEIDRYASENVNKLLVGNKCDLTTKKVVDYTTAKEFADSLGIPF LETSAKNATNVEQSFMTMAAEIKKRMGPGATAGGAEKSNVKIQSTPVKQSGGGCC

725/2682 FIGURE 664

TCCCGTGGAGCAGAGGGGCAAAGTGGCAGGAACCTCTTAAAGGGCGAGACGGGCGACCGAGAACGCGGTCGG CCCGGTCCCCGCCGCACCCAGCCCAGAGAAGAGTTTAGTGACTGAGGCCGAAAATTCACAGCACCAACAGAAGGA AGAGGGTGAGGAAGCCATAAACTCAGGCCAACAAGAACCTCAGCAGGAGGAATCTTGTCAAACAGCAGCTGAAGG AGATAATTGGTGTGAACACAAGGTGAAAGCTTCTAATGGAGACACTCCTACACATGAAGACTTGACCAAGAACAA GGAGCGGACATCAGAAAGCAGAGGACTTTCACGACTATTCTCCTCGTTTCTCAAAAAGGCCCAAATCTCAGGTGTC CGAGGAAGAAGCAAAGAAGTAGAGTCAGATAAAGAAAAAGGTGAAGGAGGTCAGAAAGAGATAGAATTTGGAAC CAGTCTTGATGAAGAGATCATTTTAAAGGCCCCAATTGCAGCTCCTGAACCGGAACTCAAAACAGACCCATCTTT GGATCTTCATTCATTAAGCAGTGCAGAAACACAGCCTCACCATTACAATTAAGAATTATTTTTAGAGTCTTCTTA TTTCTGAAGCATGTGAATATTATCTCGATCGTTAAAAGTCCTGCTCAGGAAGAACTCAGAGAAGATCCAGATTCT GAAACAGAATTAAAAGCTTCCCAAAAACCAATCAGAAAACACAGGAACATGCACTGCAAGGTTTCTTTGTTGGAT GACACAGTTTATGAATGTGTTGTGGAGAAACATGCTAAGGGACAAGATTTGCTTAAACGAGTATGTGAGCATCTC AATCTTTTGGAAGAAGACTATTTTGGTCTAGCCATTTGGGATAACGCAACCTCTAAGACATGGCTGGATTCCGCC AAAGAAATAAAAAGCAGGTTCGTGGTGTCCCTTGGAATTTTACATTTAATGTAAAGTTTTATCCACCTGACCCA GCACAGTTAACAGAAGACATAACAAGATATTATTTATGTCTTCAGCTTCGGCAGGACATAGTTGCAGGACGTCTG CCCTGTTCCTTTGCAACCTTAGCATTATTAGGTTCTTACACCATCCAGTCTGAACTGGGAGACTACGACCCAGAA GAACTGCATAAGTCATACAGGTCCATGACTCCAGCTCAGGCTGACTTGGAGTTTCTTGAGAATGCCAAAAAGTTG TCTATGTATGGAGTTGATCTTCATAAAGCAAAGGACTTGGAAGGAGTAGATATCATCCTAGGTGTCTGCTCTAGT GGCCTTCTGGTTTACAAAGATAAGCTGAGAATTAACCGCTTCCCTTGGCCCAAAGTGCTGAAGATTTCTTATAAA CGTAGTAGCTTTTTCATCAAGATTCGGCCTGGAGAGCAAGAGCAGTATGAAAGTACCATCGGATTCAAACTTCCC AGTTACCGAGCAGCTAAGAAATTATGGAAAGTCTGTGTAGAACATCACACGTTTTTCAGATTGACATCTACAGAC ACCATTCCCAAAAGCAAATTTCTTGCGCTAGGATCCAAATTTCGATACAGTGGCCGGACTCAAGCTCAGACCAGG CAAGCTAGTGCTCTAATTGACAGGCCTGCCCCACACTTCGAGCGTACAGCAAGTAAACGGGCGTCCCGGAGCCTC GATGGAGCAGCAGCTGTCGATTCGGCAGACCGAAGTCCTCGGCCCACTTCTGCACCTGCCATTACTCAGGGTCAG GCTGAAGTGAAAAAGGAAGACGAGCCACCTGAGCAAGCTGAGCCAGAGCCCACAGAAGCATGGAAGAAAAAAGAGA GAAAGACTAGATGGTGAAAACATTTATATCAGACATAGCAATTTAATGTTGGAGGATTTAGACAAGAGTCAAGAG GAGATCAAAAAACATCATGCCAGCATCAGTGAGCTGAAAAAAGAACTTCATGGAGTCTGTACCAGAACCACGGCCT AGTGAATGGGATAAACGCTTATCCACTCACTCACCCTTCCGAACTCTTAACATCAATGGGCAAATCCCCACAGGA GAAGGACCTCCCCTGGTGAAGACACAAACTGTCACCATCTCAGATAATGCCAATGCTGTGAAAAGTGAAATCCCA ACCAAAGACGTCCCTATTGTCCACACTGAGACCAAGACCATCACTTATGAGGCTGCCCAGACTGTAAAAGGTGGG ATTTCAGAGACACGTATTGAAAAGAGAATTGTGATCACAGGAGATGCTGATATTGACCATGATCAGGTCCTTGTA CAAGCCATCAAGGAGGCAAAGGAGCAGCACCCAGACATGTCAGTGACCAAGGTGGTCGTCCACCAGGAGACCGAG ATTGCTGATGAGTGAGCTCAGGAACTAACCTACCCCAACTCTGCCCTTCTCCCATCCAAGAGAAACCACGAAAAT GTTTCTATTGGGAGTTTATACCAAGAGATTCTTCTAGATCTCATTGATCCTTTTGAAGAGCTTTTTCTATATTAG GATATCAGAATTGTTCAACTTTTCACTCTATAGACTGTTTTAAGAGTTTTTGGGGGGGTTTTTAATTGGGTGGTTTG TAACCCCTTCAGCCTAG

726/2682 FIGURE 665

MHCKVSLLDDTVYECVVEKHAKGQDLLKRVCEHLNLLEEDYFGLAIWDNATSKTWLDSAKEIKKQVRGVPWNFTF
NVKFYPPDPAQLTEDITRYYLCLQLRQDIVAGRLPCSFATLALLGSYTIQSELGDYDPELHGVDYVSDFKLAPNQ
TKELEEKVMELHKSYRSMTPAQADLEFLENAKKLSMYGVDLHKAKDLEGVDIILGVCSSGLLVYKDKLRINRFPW
PKVLKISYKRSSFFIKIRPGEQEQYESTIGFKLPSYRAAKKLWKVCVEHHTFFRLTSTDTIPKSKFLALGSKFRY
SGRTQAQTRQASALIDRPAPHFERTASKRASRSLDGAAAVDSADRSPRPTSAPAITQGQVAEGGVLDASAKKTVV
PKAQKETVKAEVKKEDEPPEQAEPEPTEAWKKKRERLDGENIYIRHSNLMLEDLDKSQEEIKKHHASISELKKNF
MESVPEPRPSEWDKRLSTHSPFRTLNINGQIPTGEGPPLVKTQTVTISDNANAVKSEIPTKDVPIVHTETKTITY
EAAQTVKGGISETRIEKRIVITGDADIDHDQVLVQAIKEAKEQHPDMSVTKVVVHQETEIADE

727/2682 FIGURE 666

CTGTATTGTGGTTCCTGGAACACTTTAGAGGCTTGTGATTCTACTGCTTCTTATTCACACTATAATACATGTCTC ACCAATAGATGATTCAAGAACATCATTTAAATACACAATTTTTCATTCTCTATTTTTGCTAAATTTCTTCATACT $\texttt{GCCTTCTCTACTTCGCTCTTGGAACATAATTTCTC} \underline{\textbf{ATC}} \texttt{GCAGCTTTTACTAAACTGAGTATTGAGCCAGCATTTA}$ CTCCAGGACCCAACATAGAACTCCAGAAAGACTCTGACTGCTGTTCTTGCCAAGAAAAATGGGTTGGGTACCGGT GCAACTGTTACTTCATTTCCAGTGAACAGAAAACTTGGAACGAAAGTCGGCATCTCTGTGCTTCTCAGAAATCCA GCCTGCTTCAGCTTCAAAACACAGATGAACTGGATTTTATGAGCTCCAGTCAACAATTTTACTGGATTGGACTCT CTTACAGTGAGGAGCACACCGCCTGGTTGTGGGAGAATGGCTCTGCACTCTCCCAGTATCTATTTCCATCATTTG AAACTTTTAATACAAAGAACTGCATAGCGTATAATCCAAATGGAAATGCTTTAGATGAATCCTGTGAAGATAAAA $\tt ATCGTTATATCTGTAAGCAACAGCTCATT{\color{red}{TAA}} ATGTTTCTTGGGGCAGAGAAGGTGGAGAGTAAAGACCCAACAT$ TACTAACAATGATACAGTTGCATGTTATATTATTACTAATTGTCTACTTCTGGAGTCTATAAAATGTTTTTAAAC AGTGTCATATACAATTGTCATGTATGTGAAACAATGTGTTTTAAAATTGATGAAATTCGTTCACCTACATTTGAG AATTATAAAATTAACATAAAGAATTTTGTATTTTCATTTAATGTATATAATGTTAAATTCAATGTAGTTTATTA CACATTTATGTAATTTTATTTACATTCTTGCTAATTCTCAGCAGAAATTTAAATAAGATTTAATTCACATCAAAT AAAATTTAGAAAATAAAATTTAACTCACACTGCCCAGGCTGGAGCATAGTGGCAAGATCATAGCTCATTGCAAGC TCAAGTGATCCTCCTGACTCAGCCTCCCAAGTAGCTAGGACTGCAGGCACCATGTCACTATGCCCGACTAATTTT TAATTTTTAATTTTTTGTCAAGACAAGGTCTTGCTATGTTGCCCAGGCTGGTCTTGAACTCCTGGCCTCAA

728/2682 FIGURE 667

MAAFTKLSIEPAFTPGPNIELQKDSDCCSCQEKWVGYRCNCYFISSEQKTWNESRHLCASQKSSLLQLQNTDELD FMSSSQQFYWIGLSYSEEHTAWLWENGSALSQYLFPSFETFNTKNCIAYNPNGNALDESCEDKNRYICKQQLI

729/2682 FIGURE 668

GACCGAAGCAAGAGCTGGTTCAGGTGGCAGCCACAGCAGCCTCAGGACCTCAGCAACTATCGCCCTGCCCAG ACTCTGATAATAGCTGGGTGCTTGCTGGCTCCGAGAGCCTGCCAGTGGAGACACTGGGCCCGGCATCCAGGATGG ACCCAGAATCTGAGAGAGCCCTGCAGGCCCCTCACAGCCCCTCCAAGACAGATGGGAAAGAATTAGCTGGGACCA TGGATGGAGAGGGACGCTCTTCCAGACTGAAAGCCCTCAGTCTGGCAGCATTCTAACAGAGGAGACTGAGGTCA AGGGCACCCTGGAAGGTGATGTTTGTGGTGTGGAGCCTCCTGGCCCAGGAGACACAGTAGTCCAGGGAGACCTGC AGGAGACCACCGTGGTGACAGGCCTGGGACCAGACACAGGACCTGGAAGGCCAGAGCCCTCCACAGAGCCTGC CTTCAACCCCCAAAGCAGCTTGGATCAGGGAGGAGGGCCGCTGCTCCAGCAGTGACGATGACACCGACGTGGACA TGGAGGGTCTGCGGAGACGCCGGGGCCGGAGGCCGGCCCACCTCAGCCCATGGTGCCCCTGGCTGTGGAGAACC AGGCTGGGGGTGAGGGTGCAGGCGGGGAGCTGGGCATCTCCCTCAACATGTGCCTCCTTGGGGCCCTGGTTCTGC TTGGCCTGGGGGTCCTCCTCTCTCAGGTGGCCTCTCAGAGTCTGAGACTGGGCCCCATGGAGGAAGTGGAGCGGC CAGTGCCTCCTGACAGTGTCCCCAGCCTGCAAAACATGGGTCTTCTGCTGGACAAGCTGGCCAAGGAGAACCAGG ACATCCGGCTGCTGCAGGCCCAGCTGCAGGCCCAAAAGGAAGAGCTTCAGAGCCTGATGCACCAGCCCAAAGGGC TAGAGGAGGAGAATGCCCAGCTCCGGGGGGCTCTGCAGCAGGGCGAAGCCTTCCAGCGGGCTCTGGAGTCAGAGC TGCAGCAGCTGCGGGCCCGGCTCCAGGGGCTGGAGGCCGACTGTGTCCGGGGCCCAGATGGGGTGTGCCTCAGTG GGGGTAGAGGCCCACAGGGTGACAAGGCCATCAGGGAGCAAGGCCCCAGGGAGCAGGAGCCAGAACTCAGCTTCC TGAAGCAGAAGGAACAGCTGGAGGCTGAGGCACAGGCATTAAGGCAAGAGTTAGAGAGGCAGCGACGGCTGCTGG GGTCTGTACAGCAGGATCTGGAGAGGAGCTTGCAGGATGCCAGCCGCGGGGACCCAGCTCATGCTGGCTTGGCTG AGCTGGGCCACAGATTGGCCCAGAAACTGCAGGGCCTGGAGAACTGGGGCCAGGACCCTGGGGTCTCTGCCAATG CCTCAAAGGCCTGGCACCAGAAGTCCCACTTCCAGAATTCTAGGGAGTGGAAAGGGAAAAGTGGTGGGATG GAGGTCAGGAGGACAGGGAGCCAGCAGGAAGGTGGAAGGAGGCCAAGGGTGGAGGAGTCGGGGAGCAAGA AGGAGGCAAGCGACAGGGCCCGAAGGAACCCCCAAGGAAAAGTGGTAGCTTCCACTCCTCTGGAGAAAAGCAGA AGCAACCTCGGTGGAGGGAAGGGACTAAGGACAGCCATGACCCCTGCCATCCTGGGCAGAGCTGTTGAGGCCCA AGCTAGCCCCAGTGCGGCAACAGGAGCTGGCCTCTCTGCTAAGAACATACTTGGCACGGCTGCCCTGGGCTGGGC AGCTGACCAAGGAGCTACCCCTCTCACCTGCTTTCTTTGGTGAGGATGGCATCTTCCGTCATGACCGCCTCCGCT TAGATGACTTTGAGGACTTCATCTTCAGCCACTTCTTTGGAGACAAGCACTGAAGAAGAGGGCAAGAAGAAGG $\texttt{GC}\underline{\textbf{TGA}}\texttt{CACCCTGCCCCACAGGGAATGGCCTTGGCCTGGCCCAGCCCAAGATCCCAGCGTTATCTAACTCCTGGAG}$ GGTGGACTCTGTCCTGGCTTGTTTGGTGTCCTCAGATATCTTTCACACAGTAGAGCAAAATCACCAGCCCTGCAC GGCCCTGGGATGTGGGCTTGTGTTTTGTCACTGTGAAGGGGGAGATGGGAGAGGAGCCTGTTTTGGGGTGGGGTC TGGGGAAGGCAATCTGATTCTGAAGCTAAAGAGCTTTCATCCTCTTGAGTGTATGTCCCCATAGTGGGCCCCTTG ACCCACATGCTGACCGGTGCCTTGGGATTTGACTAGAGTTGCTGGCTCGAGGCCCAGCACGAGGACTTACCCTGG CCACGGCTTCACCTCCCTATGTGAACTGTAGACTCAGATCCCAATAAAGTGCTGTTGCAGCTATGATGCTAGGTG CTTGTTCTGTATCCCCCTTTGCCCTTGCCCTTCCAACAACCCTAGGCCCTTGAGAAGCTGATACTTCTC CTTTTGCTCACAGCTGCCTTGGCCCCACCCCTGGGAGATGTAGCAAATTGAGTGTGGGTTTTGGAGTCTGAGCCT CAGGCTCAAATCCAGGCCAAGTGATCTTGGGCAAGTTAATCTCTGGGAACTTTGGGTTTCTTATCCTCAAAAAAG

730/2682 FIGURE 669

MASCPDSDNSWVLAGSESLPVETLGPASRMDPESERALQAPHSPSKTDGKELAGTMDGEGTLFQTESPQSGSILT EETEVKGTLEGDVCGVEPPGPGDTVVQGDLQETTVVTGLGPDTQDLEGQSPPQSLPSTPKAAWIREEGRCSSSDD DTDVDMEGLRRRGREAGPPQPMVPLAVENQAGGEGAGGELGISLNMCLLGALVLLGLGVLLFSGGLSESETGPM EEVERQVLPDPEVLEAVGDRQDGLREQLQAPVPPDSVPSLQNMGLLLDKLAKENQDIRLLQAQLQAQKEELQSLM HQPKGLEEENAQLRGALQQGEAFQRALESELQQLRARLQGLEADCVRGPDGVCLSGGRGPQGDKAIREQGPREQE PELSFLKQKEQLEAEAQALRQELERQRRLLGSVQQDLERSLQDASRGDPAHAGLAELGHRLAQKLQGLENWGQDP GVSANASKAWHQKSHFQNSREWSGKEKWWDGQRDRKAEHWKHKKEESGRERKKNWGGQEDREPAGRWKEGRPRVE ESGSKKEGKRQGPKEPPRKSGSFHSSGEKQKQPRWREGTKDSHDPLPSWAELLRPKYRAPQGCSGVDECARQEGL TFFGTELAPVRQQELASLLRTYLARLPWAGQLTKELPLSPAFFGEDGIFRHDRLRFRDFVDALEDSLEEVAVQQT GDDDEVDDFEDFIFSHFFGDKALKKRSGKKDKHSQSPRAAGPREGHSHSHHHHHRG

731/2682 FIGURE 670

 ${\tt AAGCCACCCAGCCTATGCATCCGCTCCTCAATCCTCTCTGTTGGCACTGGGCCTC} \underline{{\tt ATG}} {\tt GCGCTTTTGTTGACCA}$ TCATTGAGGAGCTGGTCAACATCACCCAGAACCAGAAGGCTCCGCTCTGCAATGGCAGCATGGTATGGAGCATCA ACCTGACAGCTGGCATGTACTGTGCAGCCCTGGAATCCCTGATCAACGTGTCAGGCTGCAGTGCCATCGAGAAGA $\tt CCCAGAGGATGCTGAGCGGATTCTGCCCGCACAAGGTCTCAGCTGGGCAGTTTTCCAGCTTGCATGTCCGAGACA$ CCAAAATCGAGGTGGCCCAGTTTGTAAAGGACCTGCTCTTACATTTAAAGAAACTTTTTCGCGAGGGACGGTTCA GTGCTGCCCGTCTTCAGCCTAGCCGACCTCAGCCTTCCCCTTGCCCAGGGCTCAGCCTGGTGGGCCTCCTCTGTC CAGGGCCCTGAGCTCGGTGGACCCAGGGATGACATGTCCCTACACCCCTCCCCTGCCCTAGAGCACACTGTAGCA AGCAGCTCAGGCACACTTCTTCTTGGTCTTATTTATTATTGTGTGTTATTTAAATGAGTGTGTTTTGTCACCGTTG GGGATTGGGGAAGACTGTGGCTGCTGGCACTTGGAGCCAAGGGTTCAGAGACTCAGGGCCCCAGCACTAAAGCAG TGGACCCCAGGAGTCCCTGGTAATAAGTACTGTGTACAGAATTCTGCTACCTCACTGGGGTCCTGGGGCCTCGGA AACGAGTAATTTATTGTTTTTCCTCGTATTTAAATATTAAATATGTTAGCAAAGAGTTAATATATAGAAGGGTAC CTTGAACACTGGGGGAGGGGACATTGAACAAGTTGTTTCATTGACTATCAAACTGAAGCCAGAAATAAAGTTGGT **GACAGATA**

732/2682 FIGURE 671

 ${\tt MALLLTTVIALTCLGGFASPGPVPPSTALRELIEELVNITQNQKAPLCNGSMVWSINLTAGMYCAALESLINVSGCSAIEKTQRMLSGFCPHKVSAGQFSSLHVRDTKIEVAQFVKDLLHLKKLFREGRFN}$

733/2682 FIGURE 672

734/2682 FIGURE 673

 $\label{thm:limit} {\tt MYRMQLLSCIALILALVTNSAPTSSSTKKTKKTQLQLEHLLLDLQMILNGINNYKNPKLTRMLTFKFYMPKKATE} \\ {\tt LKQLQCLEEELKPLEEVLNLAQSKNFHLRPRDLISNINVIVLELKGSETTFMCEYADETATIVEFLNRWITFCQS} \\ {\tt IISTLT}$

735/2682 FIGURE 674

GATCCAAACATGAGCCGCCTGCCCGTCCTGCTCCTGCTCCAACTCCTGGTCCGCCCCGGACTCCAAGCTCCCATG
ACCCAGACAACGTCCTTGAAGACAAGCTGGGTTAACTGCTCTAACATGATCGATGAAATTATAACACACTTAAAG
CAGCCACCTTTGCCTTTGCTGGACTTCAACAACCTCAATGGGGAAGACCAAGACATTCTGATGGAAAATAACCTT
CGAAGGCCAAACCTGGAGGCATTCAACAGGGCTGTCAAGAGTTTACAGAACGCATCAGCAATTGAGAGCATTCTT
AAAAATCTCCTGCCATGTCTGCCCCTGGCCACGGCCGCACCCACGCGACATCCAATCCATATCAAGGACGGTGAC
TGGAATGAATTCCGGAGGAAACTGACGTTCTATCTGAAAACCCTTGAGAATGCGCAGGCTCAACAGACGACTTTG
AGCCTCGCGATCTTTTAGCTCCAACGTCCAGCTCGTTCTCTCGGGCCTTCTCACCACAGCGCCTCGGGACATCAAAA
ACAGCAGAACTTCTGAAACCTCTGGGTCATCTCTCACACATTCCAGGACCAGAAGCATTTCACCTTTTCCTGCGG
CATCAGATGAATTGTTAATTATCTAATTTCTGAAATGTGCAGCTCCCATTTGGCCTTTGTGCGGTTGTTCTC

736/2682 FIGURE 675

 ${\tt MSRLPVLLLLQLLVRPGLQAPMTQTTSLKTSWVNCSNMIDEIITHLKQPPLPLLDFNNLNGEDQDILMENNLRRP\\ {\tt NLEAFNRAVKSLQNASAIESILKNLLPCLPLATAAPTRHPIHIKDGDWNEFRRKLTFYLKTLENAQAQQTTLSLAIF}$

737/2682 FIGURE 676

 ${\tt GAGGTTGAAGGACCCAGGCGTGTCAGCCCTGCTCCAGAGACCTTGGGC} \underline{{\tt ATG}} {\tt GAGGAGAGTGTCGTACGGCCCTCA}$ GTGTTTGTGGTGGATGGACAGACCGACATCCCATTCACGAGGCTGGGACGAAGCCACCGGAGACAGTCGTGCAGT GTGGCCCGGGTGGGTCTGGTCTTGCTGTTGCTGATGGGGGCTGGCCTGGCCGTCCAAGGCTGGTTCCTCCTG CAAGAGCGAAGGTCTCACGAGGTCAACCCAGCAGCGCATCTCACAGGGGCCAACTCCAGCTTGACCGGCAGCGGG GGGCCGCTGTTATGGGAGACTCAGCTGGGCCTGGCCTTCCTGAGGGGCCTCAGCTACCACGATGGGGCCCTTGTG GTCACCAAAGCTGGCTACTACTACATCTACTCCAAGGTGCAGCTGGGCGGTGTGGGCTGCCCGCTGGGCCTGGCC \cdot TCACCCTGCGGACGGGCCACCAGCAGCTCCCGGGTCTGGTGGGACAGCAGCTTCCTGGGTGGTGTGGTACACCTG GAGGCTGGGGAGGAGGTGGTCGTGCTGCTGGATGAACGCCTGGTTCGACTGCGTGATGGTACCCGGTCTTAC ${\tt TTCGGGGGCTTTCATGGTG} \underline{{\tt TGA}} {\tt AGGAAGGAGCGTGGTGCATTGGACATGGGTCTGACACGTGGAGAACTCAGAGGG}$ TGCCTCAGGGGAAAGAAAACTCACGAAGCAGAGGCTGGGCGTGGTGGCTCTCGCCTGTAATCCCAGCACTTTGGG AGGCCAAGGCAGGCGGATCACCTGAGGTCAGGAGTTCGAGACCAGCCTGGCTAACATGGCAAAACCCCATCTCTA ATTTTGCTTAAACCCGGGAGGCGGAGGTTGCAGTGAGCCGAGATCACACCACTGCACCTCCAACCTGGGAAACGCA

738/2682 FIGURE 677

MEESVVRPSVFVVDGQTDIPFTRLGRSHRRQSCSVARVGLGLLLLLMGAGLAVQGWFLLQLHWRLGEMVTRLPDG PAGSWEQLIQERRSHEVNPAAHLTGANSSLTGSGGPLLWETQLGLAFLRGLSYHDGALVVTKAGYYYIYSKVQLG GVGCPLGLASTITHGLYKRTPRYPEELELLVSQQSPCGRATSSSRVWWDSSFLGGVVHLEAGEEVVVRVLDERLV RLRDGTRSYFGAFMV

739/2682 FIGURE 678A

TGCATCTGCTGCTGCTATTCGCGGCCGGGGCAGAACTCCCCGGCCAGGGCGTCCCACAGCCAGGGCCAGGGTC CCGGGGCCAACTTTGTGTCCTTCGTAGGGCAGGCCGGAGGCGGCGCGCGGGGGTCAGCAGCTGCCCCAGCTGC CTCAGTCATCGCAGCTTCAGCAGCAACAGCAGCAGCAGCAACAGCAACAGCCGCCTCAGCCGCCAGCCGCCTT TCCCGGCGGTGGGCCTCCGCGGCGGGGGAGGAGCGGGGGCTGGTGGGGGCTGGAAGCTGGCGGAGGAAGAGTCCT GCAGGGAGGACGTGACCCGCGTGTGCCCTAAGCACACCTGGAGCAACAACCTGGCGGTGCTCGAGTGCCTGCAGG ATGTGAGGGAGCCTGAAAATGAAATTTCTTCAGACTGCAATCATTTGTTGTGGAATTATAAGCTGAACCTAACTA CAGATCCCAAATTTGAATCTGTGGCCAGAGAGGTTTGCAAATCTACTATAACAGAGATTAAAGAATGTGCTGATG AACCGGTTGGAAAAGGTTACATGGTTTCCTGCTTAGTGGATCACCGAGGCAACATCACTGAGTATCAGTGTCACC AGTACATTACCAAGATGACGGCCATCATTTTTAGTGATTACCGTTTAATCTGTGGCTTCATGGATGACTGCAAAA ATGACATCAACATTCTGAAATGTGGCAGTATTCGGCTTGGAGAAAAGGATGCACATTCACAAGGTGAGGTGTAT CATGCTTGGAGAAAGGCCTGGTGAAAGAAGCAGAAGAAGAAGAACCCAAGATTCAAGTTTCTGAACTCTGCAAGA ATGATCGGGAGCGTTTTTGTGAAAATACACAAGCTGGTGAGGGCAGAGTGTATAAGTGCCTCTTTAACCATAAAT TTGAAGAATCCATGAGTGAAAAGTGTCGAGAAGCACTTACAACCCGCCAAAAGCTGATTGCCCAGGATTATAAAG TCAGTTATTCATTGGCCAAATCCTGTAAAAGTGACTTGAAGAAATACCGGTGCAATGTGGAAAACCTTCCGCGAT CGCGTGAAGCCAGGCTCTCCTACTTGTTAATGTGCCTGGAGTCAGCTGTACACAGAGGGCCGACAAGTCAGCAGTG AGTGCCAGGGGGAGATGCTGGATTACCGACGCATGTTGATGGAAGACTTTTCTCTGAGCCCTGAGATCATCCTAA TAGTTCGAGGGGAAAGGGGAACCTTGGAATGAACTGCCAGCAGGCGCTTCAAACACTGATTCAGGAGACTGACC CTGGTGCAGATTACCGCATTGATCGAGCTTTGAATGAAGCTTGTGAATCTGTAATCCAGACAGCCTGCAAACATA TAAGATCTGGAGACCCAATGATCTCGTCGTGCCTGATGGAACATTTATACACAGAGAAGATGGTAGAAGACTGTG AACACCGTCTCTTAGAGCTGCAGTATTTCATCTCCCGGGATTGGAAGCTGGACCCTGTCCTGTACCGCAAGTGCC AGGGAGACGCTTCTCGTCTTTGCCACACCCACGGTTGGAATGAGACCAGTGAATTTATGCCTCAGGGAGCTGTGT TCTCTTGTTTATACAGACACGCCTACCGCACTGAAGAACAGGGAAGGAGGCTCTCACGGGAGTGCCGAGCTGAAG TGGGAAAATGGTGCAGTGAGAAAACAGAGACTGGACAGGAGCTGGAGTGCCTTCAGGACCATCTGGATGACTTGG TGGTGGAGTGTAGAGATATAGTTGGCAACCTCACTGAGTTAGAATCAGAGGATATCCAAATAGAAGCCTTGCTGA TGAGAGCCTGTGAGCCCATAATTCAGACATTCTGCCACGATGCGGATAACCAGATAGACTCTGGGGACCTGATGG AGTGTCTGATACAGAACAACACCAGAAGGACATGAACGAGAAGTGTGCCATCGGAGTTACCCACTTCCAGCTGG TGCAGATGAAGGATTTTCGGTTTTCTTACAAGTTTAAAATGGCCTGCAAGGAGGACGTGTTGAAGCTTTGCCCAA ACATAAAAAAGAGGTGGACGTGGTGATCTGCCTGAGCACGACCGTGCGCAATGACACTCTGCAGGAAGCCAAGG AGCACAGGGTGTCCCTGAAGTGCCGCAGGCAGCTCCGTGTGGAGAGCTGGAGATGACGAGGACATCCGCTTGG AGCCAGATCTATACGAAGCCTGCAAGAGTGACATCAAAAACTTCTGTTCCGCTGTGCAATATGGCAACGCTCAGA TTATCGAATGTCTGAAAGAAACAAGAAGCAGCTAAGCACCCGCTGCCACCAAAAAGTATTTAAGCTGCAGGAGA CAGAGATGATGGACCCAGAGCTAGACTACACCCTCATGAGGGTCTGCAAGCAGATGATAAAGAGGTTCTGTCCGG AAGCAGATTCTAAAACCATGTTGCAGTGCTTGAAGCAAAATAAAAACAGTGAATTGATGGATCCCAAATGCAAAC AGATGATAACCAAGCGCCAGATCACCCAGAACACAGATTACCGCTTAAACCCCATGTTAAGAAAAAGCCTGTAAAG CTGACATTCCTAAATTCTGTCACGGTATCCTGACTAAGGCCAAGGATGATTCAGAATTAGAAGGACAAGTCATCT CTTGCCTGAAGCTGAGATATGCTGACCAGCGCCTGTCTTCAGACTGTGAAGACCAGATCCGAATCATTATCCAGG AGTCCGCCCTGGACTACCGCCTGGATCCTCAGCTCCAGCTGCACTGCTCAGACGAGATCTCCAGTCTATGTGCTG AAGAAGCAGCCCAAGAGCAGACAGGTCAGGTGGAGGAGTGCCTCAAGGTCAACCTGCTCAAGATCAAAACAG AATTGTGTAAAAAGGAAGTGCTAAACATGCTGAAGGAAAGCAAAGCAGACATCTTTGTTGACCCGGTACTTCATA GGAGTTACGCAGCAAAGGTGGCCCCAGCAGATGGCTTCTCTGATCTTGCCATGCAAGTAATGACGTCTCCATCTA AGAACTACATTCTCTGTGATCAGTGGGAGCATCTGTATATTGTTCCTGATTGGCCTGATGTGTGGACGGATCA CCAAGCGAGTGACACGAGAGCTCAAGGACAGG<u>TAG</u>AGCCACCTTGACCACCAAAGGAACTACCTATCCAGTGCCC

740/2682 FIGURE 678B

741/2682 FIGURE 679

MAACGRVRRMFRLSAALHLLLLFAAGGRNSPARASHSQGQGPGANFVSFVGQAGGGGPAGQQLPQLPQSSQLQQQ $\tt QQQQQQQQQPQPPQPPFPAGGPPRRGGAGAGGGWKLAEEESCREDVTRVCPKHTWSNNLAVLECLQDVREPENEI$ SSDCNHLLWNYKLNLTTDPKFESVAREVCKSTITEIKECADEPVGKGYMVSCLVDHRGNITEYQCHQYITKMTAI IFSDYRLICGFMDDCKNDINILKCGSIRLGEKDAHSQGEVVSCLEKGLVKEAEEREPKIQVSELCKKAILRVAEL SSDDFHLDRHLYFACRDDRERFCENTQAGEGRVYKCLFNHKFEESMSEKCREALTTRQKLIAQDYKVSYSLAKSC KSDLKKYRCNVENLPRSREARLSYLLMCLESAVHRGRQVSSECQGEMLDYRRMLMEDFSLSPEIILSCRGEIEHH CSGLHRKGRTLHCLMKVVRGEKGNLGMNCQQALQTLIQETDPGADYRIDRALNEACESVIQTACKHIRSGDPMIS ${\tt SCLMEHLYTEKMVEDCEHRLLELQYFISRDWKLDPVLYRKCQGDASRLCHTHGWNETSEFMPQGAVFSCLYRHAY}$ RTEEQGRRLSRECRAEVQRILHQRAMDVKLDPALQDKCLIDLGKWCSEKTETGQELECLQDHLDDLVVECRDIVG NLTELESEDIQIEALLMRACEPIIQTFCHDADNQIDSGDLMECLIQNKHQKDMNEKCAIGVTHFQLVQMKDFRFS _ YKFKMACKEDVLKLCPNIKKKVDVVICLSTTVRNDTLQEAKEHRVSLKCRRQLRVEELEMTEDIRLEPDLYEACK SDIKNFCSAVQYGNAQIIECLKENKKQLSTRCHQKVFKLQETEMMDPELDYTLMRVCKQMIKRFCPEADSKTMLQ QRLSSDCEDQIRIIIQESALDYRLDPQLQLHCSDEISSLCAEEAAAQEQTGQVEECLKVNLLKIKTELCKKEVLN MLKESKADIFVDPVLHTACALDIKHHCAALTPGRGRQMSCLMEALEDKRVRLQPECKKRLNDRIEMWSYAAKVAP ADGFSDLAMQVMTSPSKNYILSVISGSICILFLIGLMCGRITKRVTRELKDR

742/2682 FIGURE 680

TCGGGGCCAGCGCATGGGGCTGCTGAGACCGCTCCGGACGTGCGAAGCGTTCGCGGTGCGGTAGGAAGCTGAAGT $\tt CTTCAGCAGAACCCTGACCTAGGTAGGGAGTCTCA{\color{red} ATC} GCCCTGGGTGAAGAAAAGGCAGAAGCGGAAGCATCTG$ AAGACACAAAGGCCCAGTCCTATGGGAGAGGGGAGCTGCAGGGAGCCGGGAGCTGGACATCCCAGGGCCCATGAGTG GGGAGCAGCCCCACGCCTGGAAGCTGAGGGAGGGCTCATCTCCCCTGTATGGGGGGCAGAAGGGATACCTGCCC CTACTTGCTGGATTGGGACTGACCCTGGCAGCCCTCTAGAGCCCACCAGCCACAGGCCAGTGATGCCAACAGAG TCTCCGGGGAAAGCCAGGTGGAGAAGACCAAGCTTTCTTCCTCCGAGGAGTTCCCTCAGACTCTGAGCCTTCCCA TGGACCTCAGCCAGCCTCACAGCTCAGGTCTCTCTTGCCTGTCACAGTGGAAGTCCGTGCTGAGCCCAGGTT CCGCAGCTCAGCCTTCCAGCAGCATCTCTGCTTCCTCCACGGGCAGCAGTCTCCAGGGTCACCAGGAGAGGG CGGAGCCTCGTGGTGGTTCTCTGGCCAAGGTCTCCTCCTCCTGGAGCCGGTCGTCCCCCAGGAACCTTCCTCTG TGGTGGGGCTAGGACCTCGGCCCCAGTGGTCACCACAGCCTGTGTTCTCTGGGGGTGATGCTTCTGGGCTAGGCA GGAGACGCCTCTCCTTCCAGGCTGAGTACTGGGCCTGTGTGCCAGATTCCCTGCCTCCATCACCCGACCGCC ACTCCCCTCTCTGGAACCCAAATAAAGAGTATGAAGATCTGCTTGACTATACTTACCCACTGAGGCCCGGGCCTC AGCTCCCAAAGCACCTTGATAGCCGTGTGCCAGCTGACCCTGTCCTGCAGGACTCCGGGGTAGACCTGGATAGCT TCTCTGTCTCCAGCAAGCACCCTCAAATCACCTACTAATGTCTCCCCCAACTGCCCACCAGCAGCAGAGGCCACTG CCCTGCCATTTTCTGGGCCCAGAGAGCCAAGCCTTAAGCAGTGGCCCTCCAGAGTACCCCAGAAACAGGGTGGCA TGGGCTTGGCATCTTGGAGCCAACTTGCATCTACCCCCAGAGCCCCAGGCAGTAGGGATGCTCGTTGGGAGCGCA GAGAGCCAGCCCTGAGGGGTGCGAAGGACCGGCTGACTATAGGCAAGCACCTTGATATGGGCTCTCCCCAGCTAA ATGAACATCAGTCTCTGACGGAGAGTGTCTTACAGAAGGGGGGAGATTCTTCTTCAGTGCCTGTTGGAGAACACCC CAGTTTTAGAGGATGTCCTTGGGAGGATCGCAAAGCAGTCTGGTGAGCTGGAGAGCCACGCAGATCGCCTGTATG ACTCTATCTTGGCCTCTCTGGACATGCTGGCTGCCTCCTTATCCCTGACAAAAAGCCCATGGCGGCAATGG GAGAAAAAAACCTTCAAGAAGTCCTTGCAAGAGCCATTCAACACTGAAGTCAAGGGGGAAACCTTCAATATACT TAAAAAAAAAAAAAAA

.743/2682 FIGURE 681

MALGEEKAEAEASEDTKAQSYGRGSCRERELDIPGPMSGEQPPRLEAEGGLISPVWGAEGIPAPTCWIGTDPGSP SRAHQPQASDANREPVAERSEPALSGLPPATMGSGDLLLSGESQVEKTKLSSSEEFPQTLSLPRTTTICSGHDAD TEDDPSLADLPQALDLSQQPHSSGLSCLSQWKSVLSPGSAAQPSSCSISASSTGSSLQGHQERAEPRGGSLAKVS SSLEPVVPQEPSSVVGLGPRPQWSPQPVFSGGDASGLGRRRLSFQAEYWACVLPDSLPPSPDRHSPLWNPNKEYE DLLDYTYPLRPGPQLPKHLDSRVPADPVLQDSGVDLDSFSVSPASTLKSPTNVSPNCPPAEATALPFSGPREPSL KQWPSRVPQKQGGMGLASWSQLASTPRAPGSRDARWERREPALRGAKDRLTIGKHLDMGSPQLRTRDRGWPSPRP EREKRTSQSARRPTCTESRWKSEEEVESDDEYLALPARLTQTFCCQLEELICWLYNVADVTDHGTAARSNLTSLK SSLQLYRQFKKDIDEHQSLTESVLQKGEILLQCLLENTPVLEDVLGRIAKQSGELESHADRLYDSILASLDMLAG CTLIPDKKPMAAMEHPCEGV

744/2682 FIGURE 682

GGGCAACGGAGGGAAATAAAAGGGAACGGCTCCGAATCTGCCCCAGCGGCCGCTGCGAGACCTCGGCGCCGACA TCGCGACAGCGAAGCGCTTTGCACGCCAGGAAGGTCCCCTCTATGTGCTGCTGAGCCGGTCCTGGACGCGACGAG CCCGCCCTCGGTCTTCGGAGCAGAATTCGCAAAAACGGAAGGACTGGAA<u>ATG</u>GCAGACCATATGATGGCAATGAA CCACGGGCGCTTCCCCGACGGCACCAATGGGCTGCACCATCACCCTGCCCACCGCATGGGCATGGGGCAGTTCCC GAGCCCCCATCACCACCAGCAGCAGCCCCCAGCACGCCTTCAACGCCCTAATGGGCGAGCACATACACTACGG CGCGGGCAACATGAATGCCACGAGCGGCATCAGGCATGCGATGGGGCCGGGGACTGTGAACGGAGGGCACCCCCC CCTGCCGGCCAGCATGCAGCAGCAGCACCACAACCAGTATTTCAACCATCACCCCTACCCCCACAACCACTA CATGCCGGATTTGCACCCTGCTGCAGGCCACCAGATGAACGGGACAAACCAGCACTTCCGAGATTGCAACCCCAA GCACAGCGGCGGCAGCAGCACCCCCGGCGGCTCGGGCGGCAGCAGCACCCCCGGCGGCTCTGGCAGCAGCTCGGG CGGCGGCGGCAGCAGCAGCAGCGGCGGCGGCAGCGGCAACATGCCCGCCTCCGTGGCCCACGTCCC CGCTGCAATGCTGCCGCCCAATGTCATAGACACTGATTTCATCGACGAGGAAGTTCTTATGTCCTTGGTGATAGA $\tt CGTGTGCAAACAGCAGCCCAGCAGAGTGAGCTGT\underline{\textbf{TGA}} CTCGATCGAAACCCCGGCGAAAGAAATCAAACCCCCAA$ CTTCTTCGGCGTGAATTAAAAGAAACATTCCCTTAGACACAGTATCTCACTTTTCAGATCTTGAAAGGTTTGAGA TTGTTTCGTTTTTGTAGCCTTGACATTCACCCACCTCCCTTATGTAGTTGAAATATCTAGCTAACTTGGTCTTTT TCGTTGTTTGTTTTTACTCCTTTCCCTCACTTTCTCCAGTGCTCAACTGTTAGATATTAATCTTGGCAAACTGCT TAATCTTGTGGATTTTGTAGATGGTTTCAAATGACTGAACTGCATTCAGATTTACGAGTGAAAGGAAAAATTGCA TTAGTTGGTTGCATGAACTTCGAAGGGCAGATATTACTGCACAAACTGCCATCTCGCTTCATTTTTTTAACTATG CATTIGAGTACAGACTAATTTTTAAAATATGCTAAACTGGAAGATTAAACAGATGTGGGCCAAACTGTTCTGGAT TAATAGGGTGTGGAATGTCGTCAGTGGCAAACATTTCACAGATTTTTATTTTGTTTCTGTCTTCAACATTTTTGA CACTGTGCTAATAGTTATATTCAGTACATGAAAAGATACTGCTGTTGAAAGCTTTTTAGGAAATTTTGACAGT ATTTTTGTACAAAACATTTTTTTGAAAAAATACTTGTTAATTTATTCTATTTTAATTTGCCAATGTCAATAAAAA GTTAAGAAAAAAAAAAAAAAAAAAAAAAA

745/2682 FIGURE 683

 $\label{thm:constraint} $$\operatorname{MADHMMAMNHGRFPDGTNGL}$ HHPAHRMGMGQFPSPHHHQQQQPQHAFNALMGEHIHYGAGNMNATSGIRHAMGPGTVNGGHPPSALAPAARFNNSQFMGPPVASQGGSLPASMQLQKLNNQYFNHHPYPHNHYMPDLHPAAGHQMNGTNQHFRDCNPKHSGGSSTPGGSGSSTPGGSGSSSGGGAGSSNSGGGSGSGNMPASVAHVPAAMLPPNVIDTDFIDEEVLMSLVIEMGLDRIKELPELWLGQNEFDFMTDFVCKQQPSRVSC$

746/2682 FIGURE 684

ACACGGACCAAGGAGTCTAACACGTGCGCGGGTCGGGGGGCTCGCACGAAAGCCGCCGTGGCGCAATGAAGGTGAA GGCCGGCGCCCCGCCGAGGTGGGATCCCGAGGCCTCTCCAGTCCGCCGAGGGCCACCACCGCCCGTCT CGCCCGCCGCGGGAGGTGGAGCACGAGCGCACGTGTTAGGACCCGAAAGATGGTGAACTATGCCTGGGCAG GGCGAAGCCAGAGGAAACTCTGGTGGAGGTCCGTAGCGGTCCTGACGTGCAAATCGGTCGTCCGACCTGGGTATA TGAAGATGGTCGCGCCCTGGACGCGGTTCTACTCCAACAGCTGCTGCTTGTGCTGCCATGTCCGCACCGGCACCA TCCTGCTCGGCGTCTGGTATCTGATCATCATGCTGTGGTACTGTTGATTTTATTGAGTGCCCTGGCTGATCCGG ATCAGTATAACTTTTCAAGTTCTGAACTGGGAGGTGACTTTGAGTTCATGGATGATGCCAACATGTGCATTGCCA TTGCGATTTCTCTCATGATCCTGATATGTGCTATGGCTACTTACGGAGCGTACAAGCAACGCGCAGCCTGGA CAAACTCCATTCAGGAATACATACGGCAACTGCCTCCTAATTTTCCCTACAGAGATGATGTCATGTCAGTGAATC CTACCTGTTTGGTCCTTATTATTCTTCTGTTTATTAGCATTATCTTGACTTTTAAGGGTTACTTGATTAGCTGTG TTTGGAACTGCTACCGATACATCAATGGTAGGAACTCCTCTGATGTCCTGGTTTATGTTACCAGCAATGACACTA $\tt CGGTGCTGCTACCCCCGTATGATGCCACTGTGAATGGTGCTGCCAAGGAGCCACCGCCACCTTACGTGTCTG$ CC<u>TAAGCCTTCAAGTGGGCGGAGCTGAGGGCAGCAGCTTGACTTTGCAGACATCTGAGCAATAGTTCTGTTATT</u>T CACTTTTGCCATGAGCCTCTCTGAGCTTGTTTGTTGCTGAAATGCTACTTTTTAAAATTTAGATGTTAGATTGAA AACTGTAGTTTTCAACATATGCTTTGCTAGAACACTGTGATAGATTAACTGTAGAATTCTTCCTGTACGATTGGG GATATAATGGGCTTCACTAACCTTCCCTAGGCATTGAAACTTCCCCCAAATCTGATGGACCTAGAAGTCTGCTTT TGTACCTGCTGGGCCCCAAAGTTGGGCATTTTTCTCTCTGTTCCCTCTTTTTGAAAATGTAAAATAAAACCAAA AATAGACAACTTTTTCTTCAGCCATTCCAGCATAGAGAACAAAACCTTATGGAAACAGGAATGTCAATTGTGTAA TGAAGTTCAATGACAGTTTGTGTTTGGGTGGTAAAGGATTTTCTCCATGGCCTGAATTAAGACCATTAGAAAGCA CCAGGCCGTGGGAGCAGTGACCATCTGCTGACTGTTCTTGTGGATCTTGTGTCCAGGGACATGGGGTGACATGCC TCGTATGTGTTAGAGGGTGGAATGGATGTGTTTGGCGCTGCATGGGATCTGGTGCCCCTCTTCTCCTGGATTCAC ATCCCCACCCAGGGCCCGCTTTTACTAAGTGTTCTGCCCTAGATTGGTTCAAGGAGGTCATCCAACTGACTTTAT CAAGTGGAATTGGGATATATTTGATATACTTCTGCCTAACAACATGGAAAAGGGTTTTCTTTTCCCTGCAAGCTA CATCCTACTGCTTTGAACTTCCAAGTATGTCTAGTCACCTTTTAAAATGTAAACATTTTCAGAAAAATGAGGATT GCCTTCCTTGTATGCGCTTTTTACCTTGACTACCTGAATTGCAAGGGATTTTTATATATTCATATGTTACAAAGT CAGCAACTCTCCTGTTGGTTCATTATTGAATGTGCTGTAAATTAAGTTGTTTGCAATTAAAACAAGGTTTGCCCA CAAAAAAAAAA

747/2682 FIGURE 685

MVNYAWAGRSQRKLWWRSVAVLTCKSVVRPGYRGGLQARRSTLLKTCARARATAPGAMKMVAPWTRFYSNSCCLC CHVRTGTILLGVWYLIINAVVLLILLSALADPDQYNFSSSELGGDFEFMDDANMCIAIAISLLMILICAMATYGA YKQRAAWIIPFFCYQIFDFALNMLVAITVLIYPNSIQEYIRQLPPNFPYRDDVMSVNPTCLVLIILLFISIILTF KGYLISCYWNCYRYINGRNSSDVLVYVTSNDTTVLLPPYDDATVNGAAKEPPPPYVSA

748/2682 FIGURE 686

749/2682 FIGURE 687

MYTNQAEQCRKISASLQSQSPEHLLPVLIQAAQLCREKQHTKAIELLQEFSDQHPENAAEIKLTMAQLKISQGNI SKACLILRSIEELKHKPGMVSALVTMYSHEEDIDSAIEVFTQAIQWYQNHQPKSPXHLSLIREAANFKLKYGRKK EAISDLQQLWKQNPKDIHTLAQLISAYSLVDPEKAKALSKHLPSSDSMSLKVDVEALENSAGATYIRKKGGKVTG DSQPKEQGQGDLKK

750/2682 FIGURE 688

 ${\tt GTCCCAACTCTTGGACTCCATTTGCTATTCTCTTCTTCTCCCCCACACCTATCTGGTGGTGGTAGTGGGCGTTT}$ ${\tt ATATTTGCGTTCCTTTTCATTCTTAAAATCTCTTAAAAATTTTGGGTTGGGGGTATTGGGGAAGGCAGGAAA}$ GGGAAAAGGAGAGTAGTAGCTGAAGAGCAAGAGGAGGACATGGAGATGAAGAAGAAGATTAACCTGGAGTTAAGG AACAGATCCCCGGAGGAGGTGACAGAGTTAGTCCTTGATAATTGCCTGTGTGTCAATGGGGAAATTGAAGGCCTG AATGATACTTTCAAAGAACTAGAATTTCTGAGTATGGCTAATGTGGAACTAAGTTCGCTGGCCCGGCTTCCCAGC TTAAATAAACTTCGAAAATTGGAGCTTAGTGATAATATAATTTCTGGAGGCTTGGAAGTCCTGGCAGAAAATGT CCAAATCTTACCTACCTCAATCTGAGTGGAAACAAAATAAAAGATCTCAGTACAGTAGAAGCTCTGCAAAATCTT AAAAATTTGAAAAGTCTTGACCTGTTTAACTGTGAGATCACAAACCTGGAAGATTATAGAGAAAGTATTTTTGAA CTACTGCAGCAAATCACATACTTAGATGGATTTGATCAGGAGGATAATGAAGCGCCGGACTCTGAAGAGGAGGAT GATGAGGATGGAGATGAAGATGAAGAGGAAGAGGAAAATGAAGCTGGTCCACCGGAAGGATATGAGGAAGAG GAGGAGGAAGAGAGAGAGGATGAGGATGAGGATGAAGATGAAGATGAAGCAGGTTCAGAGTTGGGAGAGGGA GAAGAGGAAGTGGGCCTCTCATACTTAATGAAAGAAGAAATTCAGGATGAAGAAGATGATGATGACTATGTTGAA GAAGGGGAAGAAGAGGAGGAGGAGGAGGAGGTCTTCGAGGGGAAAGAGAGAACGAGATGCTGAAGACGAT ${\tt GGAGAGAAGAAGATGAC}$ ${\tt TAG}$ ${\tt ATCATTCTAAGACCAGATTCTCTAATGTTTCTGGGTGTGCAATAGAGTGATCAC}$ ATCTTTGTTTCTTCATGTACGATAGCTATCCCTACAGAAGATAATGTGTAACTTTTTATAGGAAAAGTGTGGTTT TTGACTCCCATTGTGGAATTCCCTAGCAATTTATTTAGACTTAATTTTTAAATTCAAGCTTACTGTATTAGTCA

751/2682 FIGURE 689

MEMKKKINLELRNRSPEEVTELVLDNCLCVNGEIEGLNDTFKELEFLSMANVELSSLARLPSLNKLRKLELSDNI ISGGLEVLAEKCPNLTYLNLSGNKIKDLSTVEALQNLKNLKSLDLFNCEITNLEDYRESIFELLQQITYLDGFDQ EDNEAPDSEEEDDEDGDEDDEEEEENEAGPPEGYEEEEEEEEEEDEDEDEDEDEAGSELGEGEEEVGLSYLMKEE IQDEEDDDDYVEEGEEEEEEEGGLRGEKRKRDAEDDGEEEDD

752/2682 FIGURE 690A

GGGCGCAGAGGAGGAAAGGGAGCAGGCGCAGGGGGACTGGAAAGGCAGCATGCGCTCGCCAGGAGCAACCTCGGC GCCCAGGGTCTGAGGCTGCAGCCCCAGTTCGCCATTGTGAGCCGCCGGGGGGAGTCCGCTAGCGCAGCCGTGC CCCCGAGTCCCCGTCCGCGCAGCG<mark>ATG</mark>GGGCACCTGCCCACGGGGATACACGGCGCCCCGCCGCCTCCTGCCTCTG CTCTGGCTCTTTGTGCTGTTCAAGAATGCTACAGCTTTCCATGTAACTGTCCAAGATGATAATAACATCGTTGTC TCATTAGAAGCTTCAGACGTCATCAGTCCAGCATCTGTGTATGTTGTGAAGATAACTGGTGAATCCAAAAATTAT TTCTTCGAATTTGAGGAATTCAACAGCACTTTGCCTCCTCTTTATTTTCAAGGCCAGTTATCATGGCCTTTAT CCTCTACCTGTAACCAGTGTTTCCATATATGACTATAAACCTTCTCCTGAAACAGGAGTCCTGTTTGAAATACAT TATCCAGAAAATATAACGTTTTCACAAGAGTGAACATTAGCTACTGGGAAGGTAAAGACTTCCGGACAATGCTA TATAAAGATTTCTTTAAGGGAAAAACAGTATTTAATCACTGGCTGCCAGGAATGTGTTATAGTAATATCACCTTT CACAGAACTGCCCCTTATCCACCTCAAAATATTTCCGTTCGTATCGTAAACTTGAACAAAAAAACAACTGGGAAGAA CAGAGTGGCAATTTCCCAGAAGAATCCTTCATGAGATCACAAGATACAATAGGAAAAGAAAAACTCTTCCATTTT ACAGAAGAAACCCCTGAAATTCCCTCGGGCAACATTTCTTCCGGTTGGCCTGATTTTAATAGCAGTGACTATGAA ACTACGTCTCAGCCATATTGGTGGGACAGTGCATCTGCAGCTCCTGAAAGTGAAGATGAATTTGTCAGCGTACTT CCCATGGAATACGAAAATAACAGTACACTCAGTGAGACAGAGAAGTCAACATCAGGCTCTTTCTCCTTTTTCCCT GAAGAGAACTTTACTGAATATTTGATGGTGGATGAAGAAGCACATGAATTTGTTGCAGAACTGAAGGAACCTGGG $\tt CTCAGCTTTTATATCAGTCCTTCAGGAGAGTGGATTGAAGAACTGACCGAGAAGCCGCAGCACGTGAGTGTCCAC$ GTTTTAAGCTCAACCACTGCCTTGATGTCCTGGACATCTTCCCAAGAGAACTACAACAGCACCATTGTGTCTGTG GTGTCGCTGACCTGCCAGAAACAAAAGGAGAGCCAGAGGCTTGAAAAGCAGTACTGCACTCAGGTGAACTCAAGC AAACCTATTATTGAAAATCTGGTTCCTGGTGCCCAGTACCAGGTTGTAATATACCTAAGGAAAGGCCCTTTGATT GGACCACCTTCAGATCCTGTGACATTTGCTATTGTTCCCACAGGAATAAAGGATTTAATGCTCTATCCTTTGGGT CCTACGGCCGTGGTTCTGAGCTGGACCAGACCTTATTTAGGCGTGTTCAGAAAATACGTGGTTGAAATGTTTTAT TTCAACCCTGCTACAATGACATCAGAGTGGACCACCTACTATGAAATAGCAGCAACTGTTTCCTTAACTGCATCC GTGAGAATAGCTAATCTGCTGCCAGCATGGTACTACAACTTCCGGGTTACCATGGTGACGTGGGGAGATCCAGAA TTGAGCTGCTGTGACAGCTCTACCATCAGCTTCATAACAGCCCCAGTGGCTCCGGAAATCACTTCTGTGGAATAT TTCAACAGTCTGTTATATATCAGTTGGACATATGGGGATGATACAACGGACTTGTCCCCATTCTAGAATGCTTCAC TGGATGGTGGTTGCAGAAGGAAAAAAGAAATTAAAAAGAGTGTAACACGCAATGTCATGACTGCAATTCTCAGC TTGCCTCCAGGCGACATCTATAACCTCTCAGTAACTGCTTGTACTGAAAGAGGAAGTAATACCTCCATGCTCCGC CTTGTCAAGCTAGAACCAGCTCCACCCAAATCACTCTTCGCAGTGAACAAAACCCAGACTTCAGTGACTTTGCTG TGGGTGGAAGAGGGAGTAGCTGATTTCTTTGAAGTTTCTGTCAACAAGTTGGCTCCAGTCAGAAAACCAAACTT CAGGAACCAGTTGCTGTTTCTTCCCATGTCGTGACCATCTCCAGCCTTCTTCCTGCCACTGCCTACAATTGTAGT GTCACCAGCTTTAGCCATGACAGCCCCAGTGTCCCTACGTTCATAGCCGTCTCAACAATGGTTACAGAGATGAAT CCCAATGTGGTAGTGATCTCCGTGCTGGCCATCCTTAGCACACTTTTAATTGGACTGTTGCTTGTTACCCTCATT ATTCTTAGGAAAAAGCATCTGCAGATGGCTAGGGAGTGTGGAGCTGGTACATTTTGTCAATTTTGCATCCTTAGAG AGGGATGGAAAGCTTCCATACAACTGGCGTAGGAGTATATTTGCTTTCTTAACCCTGCTACCCTCATGTCTTTGG ACTGATTATCTTTTGGCATTTTATATTAATCCTTGGAGTAAAAATGGTTTAAAGAAGAGGAAACTGACAAACCCG GTTCAACTGGATGACTTTGATGCCTATATTAAGGATATGGCCAAAGACTCTGACTATAAATTTTCTCTTCAGTTT GAGGAGTTGAAATTGATTGGACTGGATATCCCACACTTTGCTGCAGATCTTCCACTGAATCGATGTAAAAACCGT ATCAATGCCAACTATATTCCTGGATACAACTCACCCCAGGAGTATATTGCCACCCAGGGGCCACTGCCTGAAACC AGGAGGGTGAAATGTGACCATTACTGGCCATTCACGGAAGAACCTATAGCCTATGGAGACATCACTGTGGAGATG ATTTCAGAGGAAGAGCAGGACGACTGGGCCTGTAGACACTTCCGGATCAACTATGCTGACGAGATGCAGGATGTG ATGCATTTTAACTACACTGCATGGCCTGATCATGGTGTGCCCACAGCAAATGCTGCAGAAAGTATCCTGCAGTTT GTACACATGGTCCGACAGCAAGCTACCAAGAGCAAAGGTCCCATGATCATTCACTGCAGTGCTGGCGTGGGACGG

753/2682 FIGURE 690B

TTCAGAATCCGGAGCAGAGAGGACATGATGTGCGCCCATCCTCCCTTGCTTCCAGATTGTTTTAGTGGGCCCTGA ${\tt TGGTCATTTTCTAAACAGAGGCCCTGCTTTGTAATATGTGGCCAAGGAGATAATTTATCTCACAGAAGCACCGG}$ GAAGACTTAGCCTTAAAGAGCCTACAGTGTCCTTTTGGACTCTTTCACTTCGGGACATTTAATAATGGACCAAAT TCAACAGAACACCAGGAAGGTCAAGACGCTCTCCAAAGGGCAGGAAGTACAGCACTTCCGAAGAGTTTAGTTGGC ${\tt TAGCATCAGATTATACCTCATTATTAAAAGGAGGCATGGCCACACATGAAGAAATGGTCATTCTACTTCAAAGAA}$ GTCTTAACTGTTCTAGTTCTTGATGGTTTTCTTCCTTATTAACAGTTGGTGTTTCTTCCTTGGCCCTTTTGGACT AATGTTACTGTCCAAGTTCTTTCTCAAGAAACCACATCTGGTTCAGAAGAGTGTCAAGTTGGACTCTTTGAACTC TGTTGCTGTCTGAGCAATCGTGGTGCCTAGACTTTGCATTCCTTGTTCTGTTGACCTGCATACATGTGAGAGCTA TGACAGAGATTTCTTTTGTTTTGTTATTCTTTTGGTTGTCAGTTTCATTTTAACGAGTGTAACTAGTAACATTT TATTCTTTGGATTTTGTATAATTACAGTACATGATTGTGTATTGTGACATGAATGCTGTCAAAATGACATTGATG CTTTGAGTTGAAAGTAAACACAAGCTGGCTGCTTCCCTGTGGCAACTGTGGCT

754/2682 FIGURE 691

 ${\tt MGHLPTGIHGARRLLPLLWLFVLFKNATAFHVTVQDDNNIVVSLEASDVISPASVYVVKITGESKNYFFEFEEFN}$ STLPPPVIFKASYHGLYYIITLVVVNGNVVTKPSRSITVLTKPLPVTSVSIYDYKPSPETGVLFEIHYPEKYNVF ${\tt TRVNISYWEGKDFRTMLYKDFFKGKTVFNHWLPGMCYSNITFQLVSEATFNKSTLVEYSGVSHEPKQHRTAPYPP}$ QNISVRIVNLNKNNWEEQSGNFPEESFMRSQDTIGKEKLFHFTEETPEIPSGNISSGWPDFNSSDYETTSQPYWW DSASAAPESEDEFVSVLPMEYENNSTLSETEKSTSGSFSFFPVQMILTWLPPKPPTAFDGFHIHIEREENFTEYL MVDEEAHEFVAELKEPGKYKLSVTTFSSSGSCETRKSQSAKSLSFYISPSGEWIEELTEKPQHVSVHVLSSTTAL ${\tt MSWTSSQENYNSTIVSVVSLTCQKQKESQRLEKQYCTQVNSSKPIIENLVPGAQYQVVIYLRKGPLIGPPSDPVT}$ FAIVPTGIKDLMLYPLGPTAVVLSWTRPYLGVFRKYVVEMFYFNPATMTSEWTTYYEIAATVSLTASVRIANLLP AWYYNFRVTMVTWGDPELSCCDSSTISFITAPVAPEITSVEYFNSLLYISWTYGDDTTDLSHSRMLHWMVVAEGK KKIKKSVTRNVMTAILSLPPGDIYNLSVTACTERGSNTSMLRLVKLEPAPPKSLFAVNKTQTSVTLLWVEEGVAD ${\tt FFEVFCQQVGSSQKTKLQEPVAVSSHVVTISSLLPATAYNCSVTSFSHDSPSVPTFIAVSTMVTEMNPNVVVISV}$ LAILSTLLIGLLLVTLIILRKKHLQMARECGAGTFVNFASLERDGKLPYNWRRSIFAFLTLLPSCLWTDYLLAFY ${\tt INPWSKNGLKKRKLTNPVQLDDFDAYIKDMAKDSDYKFSLQFEELKLIGLDIPHFAADLPLNRCKNRYTNILPYD}$ ${\tt FSRVRLVSMNEEEGADYINANYIPGYNSPQEYIATQGPLPETRNDFWKMVLQQKSQIIVMLTQCNEKRRVKCDHY}$ ${\tt WPFTEEPIAYGDITVEMISEEEQDDWACRHFRINYADEMQDVMHFNYTAWPDHGVPTANAAESILQFVHMVRQQA}$ ${\tt TKSKGPMIIHCSAGVGRTGTFIALDRLLQHIRDHEFVDILGLVSEMRSYRMSMVQTEEQYIFIHQCVQLMWMKKK}$ QQFCISDVIYENVSKS

755/2682 FIGURE 692

 ${ t CTACCTCTTCCTCCACGCGGTTGAGAAGACCGGTCGGCCTGGGCAACCTGCGCTGAAGATGCCGGGAAAACTC}$ CGTAGTGACGCTGGTTTGGAATCAGACACCGCAATGAAAAAAGGGGAGACACTGCGAAAAGCAAACCGAGGAGAAA GAGAAAAAAAGAGAAGCCAAAATCTGATAAGACTGAAGAGAGATAGCAGAAGAGGAAGAAACTGTTTTCCCCAAAGC TAAACAAGTTAAAAAGAAAGCAGAGCCTTCTGAAGTTGAC<u>ATG</u>AATTCTCCTAAATCCAAAAAGGCAAAAAAGAA AGTGGTTTCTTCTAAAACCAAAAAAGTGACAAAAAATGAGGAGCCTTCTGAGGAAGAAATAGATGCTCCTAAGCC CAAGAAGATGAAGAAAGAAAAGGAAATGAATGGAGAAAACTAGAGAGAAAAGCCCCAAACTGAAGAATGGATTTCC TCATCCTGAACCGGACTGTAACCCCAGTGAAGCTGCCAGTGAAGAAAGTAACAGTGAGATAGAGCAGGAAATACC TGTGGAACAAAAAGAAGGCGCTTTCTCTAATTTTCCCATATCTGAAGAAACTATTAAACTTCTCAAAGGCCGAGG AGTGACCTTCCTATTTCCTATACAAGCAAAGACATTCCATCATGTTTACAGCGGGAAGGACTTAATTGCACAGGC GAAGAGAGGCCGTGCCCCTCAGGTACTGGTTCTTGCACCTACAAGAGAGTTGGCAAATCAAGTAAGCAAAGACTT CAGTGACATCACAAAAAAGCTGTCAGTGGCTTGTTTTTATGGTGGAACTCCCTATGGAGGTCAATTTGAACGCAT GAGGAATGGGATTGATATCCTGGTTGGAACACCAGGTCGTATCAAAGACCACATACAGAATGGCAAACTAGATCT CACCAAACTTAAGCATGTTGTCCTGGATGAAGTGGACCAGATGTTGGATATGGGATTTGCTGATCAAGTGGAAGA GATTTTAAGTGTGGCATACAAGAAGATTCTGAAGACAATCCCCAAACATTGCTTTTTTCTGCAACTTGCCCTCA TTGGGTATTTAATGTTGCCAAGAAATACATGAAATCTACATATGAACAGGTGGACCTGATTGGTAAAAAGACTCA GAAAACGGCAATAACTGTGGAGCATCTGGCTATTAAGTGCCACTGGACTCAGAGGGCAGCAGTTATTGGGGATGT CCAGAATTCAGCTATAAAGCAGGATGCTCAGTCCTTGCATGGAGACATTCCACAGAAGCAAAGGGAAATCACCCT GGTTGATTTGGTTATACAAAGCTCTCCACCAAAGGATGTAGAGTCCTACATTCATCGATCCGGGCGGACAGGCAG AGCTGGAAGGACGGGGGTGTGCATCTGCTTTTATCAGCACAAGGAAGAATATCAGTTAGTACAAGTGGAGCAAAA AGCGGGAATTAAGTTCAAACGAATAGGTGTTCCTTCTGCAACAGAAATAATAAAAGCTTCCAGCAAAGATGCCAT CAGGCTTTTGGATTCCGTGCCTCCCACTGCCATTAGTCACTTCAAACAATCAGCTGAGAAGCTGATAGAGGAGAA GGGAGCTGTGGAAGCTCTGGCAGCACCAGCCCCATATTTCAGGTGCCACGTCCGTAGACCAGCGCTCCTTGAT CAACTCAAATGTGGGTTTTGTGACCATGATCTTGCAGTGCTCAATTGAAATGCCCAAATATTAGTTATGCTTGGAA AGAACTTAAAGAGCAGCTGGGCGAGGAGATTGATTCCAAAGTGAAGGGAATGGTTTTTCTCAAAGGAAAGCTGGG TGTTTGCTTTGATGTACCTACCGCATCAGTAACAGAAATACAGGAGAAATGGCATGATTCACGACGCTGGCAGCT CAGTCGAGGCTTCAGGGGACAGCGGGACGGAAACAGAAGATTCAGAGGACAGCGGGAAGGCAGTAGAGGCCCGAG AGGACAGCGATCAGGAGGTGGCAACAAAAGTAACAGATCCCAAAACAAAGGCCAGAAGCGGAGTTTCAGTAAAGC ATTTGGTCAA<u>TAA</u>TTAGAAATAGAAGATTTATATAGCAAAAAGAGAATGATGTTTGGCAATATAGAACTGAACAT TATTTTCATGCAAAGTTAAAAGCACATTGTGCCTCCTTTTGACCACTTGCCAAGTCCCTGTCTCTTTCAGACAC AGACAAGCTTCATTTAAATTATTTCATCTGATCATTATCATTTATAACTTTATTGTTACTTCATCAGTTTTTCCT TTTGAAAGGTGTATGAATTCATTACATTTTTATTCTAATGTATTATCTGTAGATTAGAAGATAAAATCAAGCATG TATCTGCCTATACTTTGTGAGTTCACCTGTCTTTATACTCAAAAGTGTCCCTTAATAGTGTCCCTTGAAAATA AATACCTAAGGGAGTGTAACAGTCTCTGGAGGACCACTTTGAGCCTTTGGAAGTTAAGGTTTCCTCAGCCACCTG CCGAACAGTTTCTCATGTGGTCCTATTATTTGTCTACTGAGACTTAATACTGAGCAATGTTTTGAAACAAGATTT CAAACTAATCTGGGTTGTAATACAGTTTATACCAGTGTATGCTCTAGACTTGGAAGATGTAGTATGTTTGATGTG GATTACCTATACTTATGTTCGTTTTGATACATTTTTAGCTTCTCATTATAAGGTGATTCATGCTTTAGTGAATTC TTCATAGATAGTATATAAAAGTACATTTTAATAGAAAGCCAGGGTTTTAAGGAATTTCACATGTATAAGGTGG CTCCATAGCTTTATTTGTAAGTAGGCTGGATAAATGGTGCTTAAATGGTAATGTACTCCACTTCTTCCTATTGGA AGATTAACATTATTTACCAAGAAGGACTTAAGGGAGTAAGGGGCGCAGATTAGCATTGCTCAAGAGTATGTAAAA ΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑ

756/2682 FIGURE 693

MNSPKSKKAKKEEPSQNDISPKTKSLRKKKEPIEKKVVSSKTKKVTKNEEPSEEEIDAPKPKKMKKEKEMNGET
REKSPKLKNGFPHPEPDCNPSEAASEESNSEIEQEIPVEQKEGAFSNFPISEETIKLLKGRGVTFLFPIQAKTFH
HVYSGKDLIAQARTGTGKTFSFAIPLIEKLHGELQDRKRGRAPQVLVLAPTRELANQVSKDFSDITKKLSVACFY
GGTPYGGQFERMRNGIDILVGTPGRIKDHIQNGKLDLTKLKHVVLDEVDQMLDMGFADQVEEILSVAYKKDSEDN
PQTLLFSATCPHWVFNVAKKYMKSTYEQVDLIGKKTQKTAITVEHLAIKCHWTQRAAVIGDVIRVYSGHQGRTII
FCETKKEAQELSQNSAIKQDAQSLHGDIPQKQREITLKGFRNGSFGVLVATNVAARGLDIPEVDLVIQSSPPKDV
ESYIHRSGRTGRAGRTGVCICFYQHKEEYQLVQVEQKAGIKFKRIGVPSATEIIKASSKDAIRLLDSVPPTAISH
FKQSAEKLIEEKGAVEALAAALAHISGATSVDQRSLINSNVGFVTMILQCSIEMPNISYAWKELKEQLGEEIDSK
VKGMVFLKGKLGVCFDVPTASVTEIQEKWHDSRRWQLSVATEQPELEGPREGYGGFRGQREGSRGFRGQRDGNRR
FRGQREGSRGPRGQRSGGGNKSNRSQNKGQKRSFSKAFGQ

757/2682 FIGURE 694

758/2682 FIGURE 695

 ${\tt MLLAMVLTSALLLCSVAGQGCPTLAGILDINFLINKMQEDPASKCHCSANVTSCLCLGIPSDNCTRPCFSERLSQ}\\ {\tt MTNTTMQTRYPLIFSRVKKSVEVLKNNKCPYFSCEQPCNQTTAGNALTFLKSLLEIFQKEKMRGMRGKI}$

759/2682 FIGURE 696

 $\tt CGATTTCATTCCTCGCTCCCCACAGGTCCCTCTCCCCAAAATATTCCCATCTTGTCCTAGCCCATCCCCCAGACT$ ${\tt CGGTCCCGGGCCGGGTTAGCCCC}{\color{blue}{\bf ATG}{\tt GGAACGCAGCGCCTGTGTGGCCGGGGACTCAAGGCTGGCCTGACTCAA}$ GTGAACAGCACGTCCAGGAGGCGACCTCGTCCGCGGGTTTGCATTCTGGGGTGGACGAGCTGGGGGTTCGGTCCG ACCTGGACAAGGGCTGCACGGTGGAGGAGCTGCTCCGCGGGTGCATCGAAGCCTTCGATGACTCCGGGAAGGTGC GGGACCCGCAGCTGGTGCGCATGTTCCTCATGATGCACCCCTGGTACATCCCCTCCTCTCAGCTGGCGGCCAAGC TGCTCCACATCTACCAACAATCCCGGAAGGACAACTCCAATTCCCTGCAGGTGAAAACGTGCCACCTGGTCAGGT ACTGGATCTCCGCCTTCCCAGCGGAGTTTGACTTGAACCCGGAGTTGGCTGAGCAGATCAAGGAGCTGAAGGCTC GGCAGGTGACTCAGCGGAACCCTGTGGGACAGAAAAAAGCGCAAGATGTCCCTGTTGTTTGACCACCTGGAGCCCA TGGAGCTGGCGGAGCATCTCACCTACTTGGAGTATCGCTCCTTCTGCAAGATCCTGTTTCAGGACTATCACAGTT TCGTGACTCATGGCTGCACTGTGGACAACCCCGTCCTGGAGCGGTTCATCTCCCTCTTCAACAGCGTCTCACAGT GGGTGCAGCTCATGATCCTCAGCAAACCCACAGCCCCGCAGCGGGCCCTGGTCATCACACACTTTGTCCACGTGG CGGAGAAGCTGCTACAGCTGCAGAACTTCAACACGCTGATGGCAGTGGTCGGGGGGCCTGAGCCACAGCTCCATCT CCCGCCTCAAGGAGACCCACAGCCACGTTAGCCCTGAGACCATCAAGCTCTGGGAGGGTCTCACGGAACTAGTGA CGGCGACAGGCAACTATGGCAACTACCGGCGTCGGCTGGCAGCCTGTGTGGGGCTTCCGGCTTCCCGATCCTGGGTG GGGCCAAGATGAAGCAGCTCTTTAGCATCCTGGAGGAGCTGGCCATGGTGACCAGCCTGCGGCCACCAGTACAGG CCAACCCCGACCTGCTGAGCCTGCTCACGGTGTCTCTGGATCAGTATCAGACGGAGGATGAGCTGTACCAGCTGT CCCTGCAGCGGGAGCCGCGCTCCAAGTCCTCGCCAACCAGCCCCACGAGTTGCACCCCACCACCACCCCGGCCCCCGG TACTGGAGGAGTGGACCTCGGCTGCCAAACCCAAGCTGGATCAGGCCCTCGTGGTGGAGCACATCGAGAAGATGG TGGAGTCTGTGTTCCGGAACTTTGACGTCGATGGGGATGGCCACATCTCACAGGAAGAATTCCAGATCATCCGTG GGAACTTCCCTTACCTCAGCGCCTTTGGGGACCTCGACCAGAACCAGGATGGCTGCATCAGCAGGGAGGAGATGG TTTCCTATTTCCTGCGCTCCAGCTCTGTGTTGGGGGGGGCGCATGGGCTTCGTACACAACTTCCAGGAGAGCAACT CCTTGCGCCCCGTCGCCTGCCGCCACTGCAAAGCCCTGATCCTGGGCATCTACAAGCAGGGCCTCAAATGCCGAG CCTGTGGAGTGAACTGCCACAAGCAGTGCAAGGATCGCCTGTCAGTTGAGTGTCGGCGCAGGGCCCAGAGTGTGA GCCTGGAGGGGTCTGCACCCTCACCCTCACCCATGCACACCCATCACCGCGCCCTTCAGCTTCTCTCTGCCCC GCCCTGGCAGGCGAGGCTCCAGGCCTCCAGAGATCCGTGAGGAGGAGGTACAGACGGTGGAGGATGGGGTGTTTG ${\tt ACATCCACTTG} \underline{\textbf{TAA}} {\tt TAGATGCTGTGGTTGGATCAAGGACTCATTCCTGCCTTGGAGAAAATACTTCAACCAGAGC$ GGCCAGGGCTGGTGTCCCTAAGGTTGTACAGACTCTTGTGAATATTTGTATTTTCCAGATGGAATAAAAAGGCCC GTGTAATTAACCTTCA

760/2682 FIGURE 697

MGTQRLCGRGTQGWPGSSEQHVQEATSSAGLHSGVDELGVRSEPGGRLPERSLGPAHPAPAAMAGTLDLDKGCTV EELLRGCIEAFDDSGKVRDPQLVRMFLMMHPWYIPSSQLAAKLLHIYQQSRKDNSNSLQVKTCHLVRYWISAFPA EFDLNPELAEQIKELKALLDQEGNRRHSSLIDIDSVPTYKWKRQVTQRNPVGQKKRKMSLLFDHLEPMELAEHLT YLEYRSFCKILFQDYHSFVTHGCTVDNPVLERFISLFNSVSQWVQLMILSKPTAPQRALVITHFVHVAEKLLQLQ NFNTLMAVVGGLSHSSISRLKETHSHVSPETIKLWEGLTELVTATGNYGNYRRRLAACVGFRFPILGVHLKDLVA LQLALPDWLDPARTRLNGAKMKQLFSILEELAMVTSLRPPVQANPDLLSLLTVSLDQYQTEDELYQLSLQREPRS KSSPTSPTSCTPPPRPPVLEEWTSAAKPKLDQALVVEHIEKMVESVFRNFDVDGDGHISQEEFQIIRGNFPYLSA FGDLDQNQDGCISREEMVSYFLRSSSVLGGRMGFVHNFQESNSLRPVACRHCKALILGIYKQGLKCRACGVNCHK QCKDRLSVECRRRAQSVSLEGSAPSPSPMHSHHHRAFSFSLPRPGRRGSRPPEIREEEVQTVEDGVFDIHL

761/2682 FIGURE 698A

AGCTTGAGCGCGGCGGCGCGTTGTTCAGTCAGAGCGAGAACATTCCAGAGGTCGCCCAGCTCCGGCGCTGACGG GTGTGGACCGCGGACGTCGCTGGGACAGCCCCTCCCCGCTGCTCGGCGGCGGCATCTGGCCCGGCCGCTCCTCGC TGCGCTTCGCCTCCGCCTCCTCGGACTCGGACTCGGGTTTATATCGCGCCTCACTTCATCCCAGTCCCGGGCGAG CAGCGTTGGGTTTATGTCTTTATTTGACGAAAACGAGCTGTTGCGCAGCCATTGGTACCTGTATTGGGGAAACAT AGCATACAAGCAAGAAGCTTACAGCCTCAGTGGCGAAAATTTTTTCATGTCAGAGACCGAGAACTCTTGCAGTCG TTTATGTCATCCCTTCTTCTCCAGACAGAAGATACCAAAAAGTTGCAATCAAAGATCTCTTCATCTTATTGATAA AGCCACTAATAAGCCAAAATGTCTGTCAATGTCAACCGCAGCGTGTCAGACCAGTTCTATCGCTACAAGATGCCC CGTCTGATTGCCAAGGTTGAGGGCAAAGGCAATGGAATCAAGACAGTTATAGTCAACATGGTTGACGTTGCAAAG GCGCTTAATCGGCCTCCAACGTATCCCACCAAATATTTTGGTTGTGAGCTGGGAGCACAGACCCAGTTTGATGTT AAATTTGTTCTCTGTCCTGAATGTGAGAATCCTGAAACAGATTTGCATGTCAATCCAAAGAAGCAAACAATAGGT AATGGCTCCGTATCCAGCAGTGAGACACCACCACCACCACCACCACCAAATGAAATTAATCCTCCTCCACATACA ATGGAAGAAGAGGAGGATGATGACTGGGGAGAAGATACAACTGAGGAAGCTCAAAGGCGTCGAATGGATGAAATC AGTGACCATGCAAAAGTTCTGACACTCAGTGATGATTTGGAAAGAACAATTGAGGAGAGGGTCAATATCCTCTTT GATTTTGTTAAGAAAAGAAGAAGAAGGGTGTTATTGATTCATCTGACAAAGAAATCGTTGCTGAAGCAGAAAGA CTGGATGTAAAAGCCATGGGCCCTCTTGTTCTAACTGAAGTTCTTTTTAATGAGAAGATTAGAGAACAGATTAAG AAATACAGGCGCCATTTCCTACGATTTTGTCACAACAACAAAAAAAGCCCAACGGTACCTTCTTCATGGTTTGGAG TGTGTGGTAGCAATGCATCAAGCTCAGCTTATCTCCAAGATTCCACATATCTTGAAGGAGATGTACGATGCAGAC CTTTTAGAAGAAGAGGTCATCATCAGCTGGTCGGAAAAGGCCTCTAAGAAATATGTCTCCAAAGAACTTGCCAAA GAGATTCGTGTCAAAGCAGAACCATTTATAAAATGGTTGAAGGAGGCAGAGGAAGAATCTTCTGGTGGCGAAGAA GAAGATGAAGATGAGAACATTGAGGTGGTGTATTCGAAGGCTGCCAGTGTACCGAAAGTTGAGACTGTAAAGTCA GACAACAAGGATGACGACATCGATATTGATGCCATT<u>TAAA</u>AGGGATGGATGCAACCTAGCTTAACAGTATAATGCT ACTTTACACTAAAAATCTATTACTGTGAGTGGTCTGTTATTAAGCCCAATGAGACATCTAGGGAGTCCATACACA TCAGTGAGCAGATGTAGTTTGCTTATTTATAGCATGTTTCTTTTTGAAAAACTAGTGGTGGACACATTTGGATCA CATTTATACAGTTATAAAAATAAAGGTTTGATTTTGGTCGTTCTTCAGATGTTTGGCTCTGAATGACTTAAGCTG AAGTAACTGGCTCCTTACTTTAAATGTTCTGCCATCATTTCACCTGATGAGCATTCTTGGAGCCTGCCAGATATT ATTAAGAAAGTACTAAAGTTTTATCTCTGTAGTTCCTCAAATTGGCATCTGGTAATGTACATTGTGAGGTAGACT AGGATTTGAAACTTGGAGAGCTGTTTTCTCATTTCATGTACACTTGCCCCAAATTGTCTTTGAAGTCGTGTGCAT AGCAACCTAAGCATGATTTTTCAGCTTTTGCCCTTAGGGTTTAAATTACAATTCCAAAATGTTAGACATACTGTA TTTTTTCGTTCAGTGTGGCTTTAATTTTCCCCTCTTGCAGTTTGTTCTGTAATGCCTTTTACATTTGGACACATA ATTTTGGTGTAAGACTTGGGATATTTTTTACTTCACATTGAATATAGCCAGGCACCCAAGAAGTCTGATGGCCAC CTGAGTGCAGGTGACAAGGACCTGACAGAGCCCATGCAGGGCTTTAGATTTGGACACACAAGAGTTGATAACTTC CTCATGAACTCCTTGCCTGATCTAAACTCATATTATGGGTTCTGACTGTTTGAGTAATCGTCTTCAAGGTTAAAC CTCTTGGCAGTTACCCTTTTCACAAAGTGCACAGTGGGAATCGAGAATCGATAGGGTTAATTTTGGAGCAGTGGC TTATACCATTCACCTCTGTTTTTTTGTGATTATTTCACAGATAATGAGACCTTAATAACAAATAGGCGTAAAAAA TAGCAATCTTATTGGAGAGACAAGAATTGGTCTCCAGCTGCCTTTGATCAAGATTCGGGTGCAAGTGGAGCAGGA GGTTTCAAATTCTTTGCCGCAAGGCTGATCTGCTTTCATTAACTGGAATTCTGTAGGAGATACTGGTGACCTAAG

^{762/2682} **FIGURE 698B**

763/2682 FIGURE 699

MSVNVNRSVSDQFYRYKMPRLIAKVEGKGNGIKTVIVNMVDVAKALNRPPTYPTKYFGCELGAQTQFDVKNDRYI VNGSHEANKLQDMLDGFIKKFVLCPECENPETDLHVNPKKQTIGNSCKACGYRGMLDTHHKLCTFILKNPPENSD SGTGKKEKEKKNRKGKDKENGSVSSSETPPPPPPPPNEINPPPHTMEEEEDDDWGEDTTEEAQRRRMDEISDHAKV LTLSDDLERTIEERVNILFDFVKKKKEEGVIDSSDKEIVAEAERLDVKAMGPLVLTEVLFNEKIREQIKKYRRHF LRFCHNNKKAQRYLLHGLECVVAMHQAQLISKIPHILKEMYDADLLEEEVIISWSEKASKKYVSKELAKEIRVKA EPFIKWLKEAEEESSGGEEEDEDNIEVVYSKAASVPKVETVKSDNKDDDIDIDAI

764/2682 FIGURE 700

GGGGCGGGAGCGGACTTCCTCCTCTGAGGGCCGTGCCGCGCTGCCAGATTTGTTCTTCCGCCCCTGCCTCCGCG CGCCGGCGAGGGCC<u>ATG</u>TCGCTGTTGGGGGACCCGCTACAGGCCCTGCCGCCCTCGGCCGCCCCCACGGGGCCGC TGCTCGCCCTCCGGCCGGCGCGACCCTCAACCGCCTGCGGGAGCCGCTGCTGCGGAGGCTCAGCGAGCTCCTGG ATCAGGCGCCCGAGGGCCGGGGCTGGAGGAGACTGGCGGAGCTGGCGGGGAGTCGCGGGGCGCCTCCGCCTCAGTT TGGGTGAAAAAGGTTGCACAGTCACAGAATTGAGTGATTTCCTGCAGGCTATGGAACACACTGAAGTTCTTCAGC TGTGTTGCCGGGCAACTGGACATCCTTTTGTTCAATATCAGTGGTTCAAAATGAATAAAGAGATTCCAAATGGAA TCACCTTTGAATTCAGCCAGTGGTCACAGCTGGATGTTTGCGACATCCCAGAGAGCTTCCAGAGAAGTGTTGATG GCGTCTCTGAATCCAAGTTGCAAATCTGTGTTGAACCAACTTCCCAAAAGCTGATGCCAGGCAGCACATTGGTTT TACAGTGTGTTGCTGTTGGAAGCCCTATTCCTCACTACCAGTGGTTCAAAAATGAATTACCATTAACACATGAGA CCAAAAAGCTATACATGGTGCCTTATGTGGATTTGGAACACCAAGGAACCTACTGGTGTCATGTATATAATGATC GAGACAGTCAAGATAGCAAGAAGGTAGAAATCATCATAGGAAGAACAGATGAGGCAGTGGAGTGCACTGAAGATG AATTAAATAATCTTGGTCATCCTGATAATAAAGAGCAAACAACTGACCAGCCTTTGGCGAAGGACAAGGTTGCCC TTTTGATAGGAAATATGAATTACCGGGAGCACCCCAAGCTCAAAGCTCCTTTGGTGGATGTACGAATTGACTA ACTTACTGAGACAGCTGGACTTCAAAGTGGTTTCACTGTTGGATCTTACTGAATATGAGATGCGTAATGCTGTGG ATGAGTTTTTACTCCTTTTAGACAAGGGAGTATATGGGTTATTATATTATGCAGGACATGGTTATGAAAATTTTG GGAACAGCTTCATGGTCCCCGTTGATGCTCCAAATCCATATAGGTCTGAAAATTGTCTGTGTGTACAAAATATAC TGAAATTGATGCAAGAAAAAGAAACTGGACTTAATGTGTTCTTATTGGATATGTGTAGGAAAAGAAATGACTACG ATGATACCATTCCAATCTTGGATGCACTAAAAGTCACCGCCAATATTGTGTTTTGGATATGCCACGTGTCAAGGAG CAGAAGCTTTTGAAATCCAGCATTCTGGATTGGCAAATGGAATCTTTATGAAATTTTTAAAAGACAGATTATTAG AAGATAAGAAAATCACTGTGTTACTGGATGAAGTTGCAGAAGATATGGGTAAGTGTCACCTTACCAAAGGCAAAC AGGCTCTAGAGATTCGAAGTAGTTTATCTGAGAAGAGAGCACTTACTGATCCAATACAGGGAACAGAATATTCTG CTGAATCTCTTGTGCGGAATCTACAGTGGGCCAAGGCTCATGAACTTCCAGAAAGTATGTGTCTTAAGTTTGACT GTGGTGTTCAGATTCAATTAGGATTTGCAGCTGAGTTTTCCAATGTCATGATCATCTATACAAGTATAGTTTACA AACCACCGGAGATAATAATGTGTGATGCCTACGTTACTGATTTTCCACTTGATCTAGATATTGATCCAAAAGATG CAAATAAAGGCACACCTGAAGAAACTGGCAGCTACTTGGTATCAAAGGATCTTCCCAAGCATTGCCTCTATACCA GACTCAGTTCACTGCAAAAATTAAAGGAACATCTAGTCTTCACAGTATGTTTATCATATCAGTACTCAGGATTGG AAGATACTGTAGAGGACAAGCAGGAAGTGAATGTTGGGAAACCTCTCATTGCTAAATTAGACATGCATCGAGGTT TGGGAAGGAAGACTTGCTTTCAAACTTGTCTTATGTCTAATGGTCCTTACCAGAGTTCTGCAGCCACCTCAGGAG GAGCAGGGCATTATCACTCATTGCAAGACCCATTCCATGGTGTTTACCATTCACATCCTGGTAATCCAAGTAATG GTCATTTTAGTAGAAGTAATGTGCCAGTAGAGACAACTGATGAAATACCATTTAGTTTCTCTGACAGGCTCAGAA $\verb|TTTCTGAAAAA| \frac{\texttt{TGA}}{\texttt{CCTCCTTGTTTTTGAAAGTTAGCATAATTTTAGATGCCTGTGAAATAGTACTGCACTTACA|}$ CAGGACTTTGAGATGTTGAAATTACATTATTTAATTACAGACTTCCTCTTTCT

765/2682 FIGURE 701

MSLLGDPLQALPPSAAPTGPLLAPPAGATLNRLREPLLRRLSELLDQAPEGRGWRRLAELAGSRGRLRLSCLDLE QCSLKVLEPEGSPSLCLLKLMGEKGCTVTELSDFLQAMEHTEVLQLLSPPGIKITVNPESKAVLAGQFVKLCCRA TGHPFVQYQWFKMNKEIPNGNTSELIFNAVHVKDAGFYVCRVNNNFTFEFSQWSQLDVCDIPESFQRSVDGVSES KLQICVEPTSQKLMPGSTLVLQCVAVGSPIPHYQWFKNELPLTHETKKLYMVPYVDLEHQGTYWCHVYNDRDSQD SKKVEIIIGRTDEAVECTEDELNNLGHPDNKEQTTDQPLAKDKVALLIGNMNYREHPKLKAPLVDVYELTNLLRQ LDFKVVSLLDLTEYEMRNAVDEFLLLLDKGVYGLLYYAGHGYENFGNSFMVPVDAPNPYRSENCLCVQNILKLMQ EKETGLNVFLLDMCRKRNDYDDTIPILDALKVTANIVFGYATCQGAEAFEIQHSGLANGIFMKFLKDRLLEDKKI TVLLDEVAEDMGKCHLTKGKQALEIRSSLSEKRALTDPIQGTEYSAESLVRNLQWAKAHELPESMCLKFDCGVQI QLGFAAEFSNVMIIYTSIVYKPPEIIMCDAYVTDFPLDLDIDPKDANKGTPEETGSYLVSKDLPKHCLYTRLSSL QKLKEHLVFTVCLSYQYSGLEDTVEDKQEVNVGKPLIAKLDMHRGLGRKTCFQTCLMSNGPYQSSAATSGGAGHY HSLQDPFHGVYHSHPGNPSNVTPADSCHCSRTPDAFISSFAHHASCHFSRSNVPVETTDEIPFSFSDRLRISEK

766/2682 FIGURE **702**

ATGAGGAGGGACGAGACGCCAAAGCCATGCGGTCCCTGCAGCCGCCGGATGGGGCCGGCTCGCCCCCGAG AGTCTGAGGAACGGCTACGTGAAGAGCTGCGTGAGCCCCTTGCGGCAGGACCCTCCGCGCGGCTTCTTCTTCCAC TGCCGGGCGCCTCTCGCTGGGCGACCTGGCTGCCTTTGTCCTCGCCCTGCTGCTGGGAGCGGAACCCGAGAGC TGGGCTGCCGGGGCCGCCTGCCGGACGCTGCTGAGCGTGTTCGCACAGCTTGAGCCCCCCTCTTCAGCATC GCCTGTGCCTTCTTCTTCCTCACCTGCTTCCTCACCCGGACCAAGCGGGGACCCGGGCCCGGGCCGGAGCTGCGGC TCCTGGTGGCTGCTGGCGCCTGCTGTTACCTGGGGGACTTCTTGGTGTGGCAGTGGTGGTCTTGGCCT TGGGGGGATGGCGACGCACGGCCCCGCACACGCCCCCGGAGGCGGCAGCGGCAGGTTGCTGCTGGTG CTGAGCTGCGTAGGGCTGCTGACGCTCGCGCACCCGCTGCGGCTCCGGCACTGCGTTCTGGTGCTCCTG GCCAGCTTCGTCTGGTGGGTCTCCTTCACCAGCCTCGGGTCGCTGCCCTCCGCCCTCAGGCCGCTGCTCTCCGGC CTGGTGGGGGGCGCTGGCTGCCTGGCCCTGGGGTTGGATCACTTCTTTCAAATCAGGGAAGCGCCTCTTCAT CCTCGACTGTCCAGTGCCGCCGAAGAAAAAGTGCCTGTGATCCGACCCCGGAGGAGGTCCAGCTGCGTGTCGTTA GGAGAAACTGCAGCCAGTTACTATGGCAGTTGCAAAATATTCAGGAGACCGTCGTTGCCTTGTATTTCCAGAGAA CAGATGATTCTTTGGGATTGGGACTTAAAACAATGGTATAAGCCTCATTATCAAAATTCTGGAGGTGGAAATGGA GTCATTTCCTCTCTACGGAGTATTAGTAGCTTAATGGGTGCTTTCTCAGGTTCCTGTAGGCCAAAGATTAATCCT CTCACACCATTTCCTGGATTTTACCCCTGTTCTGAAATAGAGGACCCAGCTGAGAAAAGGGGATAGAAAACTTAAC AAGGGACTAAATAGGAATAGTTTGCCAACTCCACAGCTGAGGAGAAGCTCAGGAACTTCAGGATTGCTACCTGTT GAACAGTCTTCAAGGTGGGATCGTAATAATGGCAAAAGGCCTCACCAAGAATTTGGCATTTCAAGTCAAGGATGC TATCTAAATGGGCCTTTTAATTCAAATCTACTGACTATCCCGAAGCAAAGGTCATCTTCTGTATCACTGACTCAC CATGTAGGTCTCAGAAGAGCTGGTGTTTTGTCCAGTCTGAGTCCTGTGAATTCTTCCAACCATGGACCAGTGTCT ACTGGCTCTCTAACTAATCGATCACCCATAGAATTTCCTGATACTGCTGATTTTCTTAATAAGCCAAGCGTTATC TTGCAGAGATCTCTGGGCAATGCACCTAATACTCCAGATTTTTATCAGCAACTTAGAAATTCTGATAGCAATCTG TGTAACAGCTGTGGACATCAAATGCTGAAATATGTTTCAACATCTGAATCAGATGGTACAGATTGCTGCAGTGGA AAATCAGGTGAAGAAGAAACATTTTCTCGAAAGAATCATTCAAACTTATGGAAACTCAACAAGAAGAGGGAAACA GAGAAGAAAGACAGCAGAAAATTATTTCAGGAAGGTGATAAGTGGCTAACAGAAGAGGCACAGAGTGAACAGCAA ACAAATATTGAACAGGAAGTATCACTGGACCTGATTTTAGTAGAAGAGTATGACTCATTAATAGAAAAGATGAGC TATACCTTATTTCAAGACACTGGTTTATTGGAAATATTTAAAATTCCCACTCAACAATTTATGAACTATTTTCGT GCATTAGAAAATGGCTATCGAGACATTCCTTATCACAATCGTATACATGCCACAGATGTGCTACATGCAGTTTGG TATCTGACAACACGGCCAGTTCCTGGCTTACAGCAGATCCACAATGGTTGTGGAACAGGAAATGAAACAGATTCT GATGGTAGAATTAACCATGGGCGAATTGCTTATATTTCTTCGAAGAGCTGCTCTAATCCTGATGAGAGTTATGGC CCAGGGAGGACAAATGCATTTCTAGTGGCTACAAATGCCCCTCAGGCAGTTTTATACAATGACAGATCTGTTCTG CATGTGGAATTCAAGCGCTTTCGTTTTTTAGTCATTGAAGCAATCCTTGCTACGGATCTTAAAAAGCATTTTGAT TTTCTCGCAGAATTCAATGCCAAGGCAAATGATGTAAATAGTAATGGCATAGAATGGAGTAATGAAAATGATCGC CTCTTGGTATGCCAGGTGTGCATCAAACTGGCAGATATAAATGGCCCAGCAAAAGTTCGAGACTTGCATTTGAAA TGGACAGAAGGCATTGTCAATGAATTTTATGAGCAGGGAGATGAAGAAGCAAATCTTGGTCTGCCCATCAGTCCA TTCATGGATCGTTCTTCTCCTCAACTAGCAAAACTCCAAGAATCTTTTATCACCCACATAGTGGGTCCCCTGTGT AACTCCTATGATGCTGCTGGTTTGCTACCAGGTCAGTGGTTAGAAGCAGAAGAGGATAATGATACTGAAAGTGGT GATGATGAAGACGGTGAAGAATTAGATACAGAAGATGAAGAATTGGAAAACAATCTAAATCCAAAACCACCAAGA GTAGAGGAAGAAGAAAATGTAAAGCTGATGGGAATAAACTGCAGGTGGAGAATTCCTCCTTACCTCAAGCAGAT GAGATTCAGGTAATTGAAGAGGCAGATGAAGAGGAA<u>TA</u>G

767/2682 FIGURE 703

MRRDERDAKAMRSLQPPDGAGSPPESLRNGYVKSCVSPLRQDPPRGFFFHLCRFCNVELRPPPASPQQPRRCSPF
CRARLSLGDLAAFVLALLLGAEPESWAAGAAWLRTLLSVCSHSLSPLFSIACAFFFLTCFLTRTKRGPGPGRSCG
SWWLLALPACCYLGDFLVWQWWSWPWGDGDAGSAAPHTPPEAAAGRLLLVLSCVGLLLTLAHPLRLRHCVLVLLL
ASFVWWVSFTSLGSLPSALRPLLSGLVGGAGCLLALGLDHFFQIREAPLHPRLSSAAEEKVPVIRPRRSSCVSL
GETAASYYGSCKIFRRPSLPCISREQMILWDWDLKQWYKPHYQNSGGGNGVDLSVLNEARNMVSDLLTDPSLPPQ
VISSLRSISSLMGAFSGSCRPKINPLTPFPGFYPCSEIEDPAEKGDRKLNKGLNRNSLPTPQLRRSSGTSGLLPV
EQSSRWDRNNGKRPHQEFGISSQGCYLNGPFNSNLLTIPKQRSSSVSLTHHVGLRRAGVLSSLSPVNSSNHGPVS
TGSLTNRSPIEFPDTADFLNKPSVILQRSLGNAPNTPDFYQQLRNSDSNLCNSCGHQMLKYVSTSESDGTDCCSG
KSGEEENIFSKESFKLMETQQEEETEKKDSRKLFQEGDKWLTEEAQSEQQTNIEQEVSLDLILVEEYDSLIEKMS
NWNFPIFELVEKMGEKSGRILSQVMYTLFQDTGLLEIFKIPTQQFMNYFRALENGYRDIPYHNRIHATDVLHAVW
YLTTRPVPGLQQIHNGCGTGNETDSDGRINHGRIAYISSKSCSNPDESYGCLSSNIPALELMALYVAAAMHDYDH
PGRTNAFLVATNAPQAVLYNDRSVLENHHAASAWNLYLSRPEYNFLLHLDHVEFKRFRFLVIEAILATDLKKHFD
FLAEFNAKANDVNSNGIEWSNENDRLLVCQVCIKLADINGPAKVRDLHLKWTEGIVNEFYEQGDEEANLGLPISP
FMDRSSPQLAKLQESFITHIVGPLCNSYDAAGLLPGQWLEAEEDNDTESGDDEDGEELDTEDEEMENNLNPKPPR
RKSRRRIFCQLMHHLTENHKIWKEIVEEEEKCKADGNKLQVENSSLPQADEIQVIEEADEEE

768/2682 FIGURE 704

CCATTCTTCTCCCGGGAGCCCTCATCTATGCACATCTCCTCAAGCCTGCCCCCTGACACACAGAAGTTCCTTCGC TTTGCAGAGACTCACCGCACTGTGTTAAACCAGATCCTACGGCAGTCCACGACCCACCTTGCTGATGGGCCTTTT GCTGTCCTGGTAGACTACATTCGTGTCCTCGACTTTGATGTCAAGCGCAAATATTTCCGCCAAGAGCTGGAGCGT TTAGATGAGGGGCTCCGGAAAGAAGACATGGCTGTGCATGTCCTTCGTGACCATGTGTTTGAAGACTCCTATCGT GAGCTGCATCGCAAATCCCCCGAAGAATGAAGAATCGATTGTATATAGTATTTGAAGGAGAAGAAGGGCAGGAT ${\tt GCTGGCGGGCTCCTGCGGGGGTGGTAT} \underline{{\tt ATG}} {\tt ATG} {\tt ATCATCTCTCGAGAGATGTTTAACCCTATGTATGCCTTGTTCCGT}$ ACCTCACCTGGTGATCGAGTCACCTACACCATCAATCCATCTTCCCACTGCAACCCCCAACCACCTCAGCTACTTC AAGTTTGTCGGACGCATTGTGGCCAAAGCTGTATATGACAACCGTCTTCTGGAGTGCTACTTTACTCGATCCTTT TACAAACACATCTTGGGCAAGTCAGTCAGATATACAGATATGGAGAGTGAAGATTACCACTTCTACCAAGGTCTG GTTTATCTGCTGGAAAATGATGTCTCCACACTAGGCTATGACCTCACCTTCAGCACTGAGGTCCAAGAGTTTGGA GTTTGTGAAGTTCGTGACCTCAAACCCAATGGGGCCAACATCTTGGTAACAGAGGAGAATAAGAAGGAGTATGTA CACCTGGTATGCCAGATGAGAATGACAGGAGCCATCCGCAAGCAGTTGGCGGCTTTCTTAGAAGGCTTCTATGAG ATCATTCCAAAGCGCCTCATTTCCATCTTCACTGAGCAGGAGTTAGAGCTGCTTATATCAGGACTGCCCACCATT GACATCGATGATCTGAAATCCAACACTGAATACCACAAGTACCAGTCCAACTCTATTCAGATCCAGTGGTTCTGG AGAGCATTGCGTTCTTTCGATCAAGCTGACCGTGCCAAGTTCCTCCAGTTTGTCACGGGTACTTCCAAGGTACCC CTGCAAGGCTTTGCTGCCCTCGAAGGCATGAATGGCATTCAGAAGTTTCAGATCCATCGAGATGACAGGTCCACA ${\tt CACATGCTACTGTTGGCTATCCAGGAGTGCTCTGAAGGCTTTGGGCTGGCC} {\color{red}{\textbf{TAA}}} {\tt TAAGGCCCTGCCCAACTCCGT}$ AATAAATGAAATCCACCAACTCACCGTGTGTGTCCCAGCTGCCCCATCTTCCCCAGCGCATACCTGTTCCTCTTC TCATTCTCTCCCCGCCGCCTGTTTCCTCACCTTCTCTCCCCTTTCCATGCCGTCCATGATCCCCACCCCATGTGT TTTAAAAAGGCAGTAGCCTTTGCAGGGACCTGTCTGTCCCAACTGTTTGAACAGTGTGCTCCTCAGATTCTGTGT TCTGTTTGCATTTCTTAATTTGTGCTTGGAATGTGTTGATGTGCACAGCTAATGATTCAATGCGAGACAAGATTG

769/2682 FIGURE 705

MIISREMFNPMYALFRTSPGDRVTYTINPSSHCNPNHLSYFKFVGRIVAKAVYDNRLLECYFTRSFYKHILGKSV RYTDMESEDYHFYQGLVYLLENDVSTLGYDLTFSTEVQEFGVCEVRDLKPNGANILVTEENKKEYVHLVCQMRMT GAIRKQLAAFLEGFYEIIPKRLISIFTEQELELLISGLPTIDIDDLKSNTEYHKYQSNSIQIQWFWRALRSFDQA DRAKFLQFVTGTSKVPLQGFAALEGMNGIQKFQIHRDDRSTDRLPSAHTCFNQLDLPAYESFEKLRHMLLLAIQE CSEGFGLA

770/2682 FIGURE 706A

TCTAGATGGGGGTCCTGGGCCCCAGGGTGTGCAGCCACTGACTTGGGGACTGCTGGTGGGGTAGGGATGAGGGAG GGAGGGCATTGTGATGTACAGGGCTGCTCTGTGAGATCAAGGGTCTCTTAAGGGTGGGAGCTGGGGCAGGGACT GTGGGGAGTTGGCCCAGAGTCTTAAGATTGGGGCAGGGTGGAGAGGTGGGCTCTTCCTGCTTCCCACTCATCTTA TAGCTTTCTTTCCCCAGATCCGAATTCGAGATCCAAACCAAGGAGGAAAGGATATCACAGAGGAGATC<u>ATG</u>TCTG GGGCCCGCACTCCCACACCCCTCCCCAGACGGGAGGCAGTCTGGAGCCTCAAGCTAATGGGGAGACGC CCCAGGTTGCTGTCATTGTCCGGCCAGATGACCGGTCACAGGGAGCAATCATTGCTGACCGGCCAGGGCTGCCTG GCCCAGAGCATAGCCCTTCAGAATCCCAGCCTTCGTCGCCTTCTCCGACCCCATCACCATCCCCAGTCTTGGAAC CGGGGTCTGAGCCTAATCTCGCAGTCCTCTCTATTCCTGGGGACACTATGACAACTATACAAATGTCTGTAGAAG AATCAACCCCCATCTCCCGTGAAACTGGGGAGCCATATCGCCTCTCTCCAGAACCCACTCCTCTCGCCGAACCCA TACTGGAAGTAGAAGTGACACTTAGCAAACCGGTTCCAGAATCTGAGTTTTCTTCCAGTCCTCTCCAGGCTCCCA CCCCTTTGGCATCTCACACAGTGGAAATTCATGAGCCTAATGGCATGGTCCCATCTGAAGATCTGGAACCAGAGG TGGAGTCAAGCCCAGAGCTTGCTCCTCCCCAGCTTGCCCCTCCGAATCCCCTGTGCCCATTGCTCCAACTGCCC AGGCCAAGGAGGTGACAGCATCAGTGGCGCCCCCACCATCCCTCTGCTACTCCAGCTACGGCTCCTTCAGCTA CTTCCCCAGCTCAGGAGGAGGAAATGGAAGAAGAAGAAGATGAGGAAGAAGGAGAAGTAGGGGAAGCAGGGGAAG GTGAGAGTGAGAAGAGAGGAGGAACTGCTCCCCCCAGAGAGTACCCCTATTCCAGCCAACTTGTCTCAGAATT TGGAGGCAGCAGCCACTCAAGTGGCAGTATCTGTGCCAAAGAGGAGACGGAAAATTAAGGAGCTAAATAAGA AGGAGGCTGTTGGAGACCTTCTGGATGCCTTCAAGGAGGCGAACCCGGCAGTACCAGAGGTGGAAAATCAGCCTC CTGCAGGCAGCAATCCAGGCCCAGAGTCTGAGGGCAGTGGTGTGCCCCCACGTCCTGAGGAAGCAGATGAGACCT GGGACTCAAAGGAAGACAAAATTCACAATGCTGAGAACATCCAGCCCGGGGAACAGAAGTATGAATATAAGTCAG ATCAGTGGAAGCCTCCAAACCTAGAGGAGAAAAAACGTTACGACCGTGAGTTCCTGCTTGGTTTTCAGTTCATCT TTTGCCAGATGCAGAGCCAGAGGGATTGCCACATATCAGTGACGTGGTGCTGGACAAGGCCAATAAAACACCAC TGCGGCCACTGGATCCCACTAGACTACAAGGCATAAATTGTGGCCCAGACTTCACTCCATCCTTTGCCAACCTTG GCCGGACAACCCTTAGCACCCGTGGGCCCCCAAGGGGTGGGCCAGGTGGGGAGCTCGCCCGTGGCGCAGGCTG GCCTGGGACCCCGGCGCTCTCAGCAGGGACCCCGAAAAGAACCACGCAAGATCATTGCCACAGTGTTAATGACCG AAGATATAAAACTGAACAAAGCAGAGAAAGCCTGGAAACCCAGCAGCAGCGGACAGCGGCTGATAAGGATCGAG GGGAAGAAGATGCTGATGGCAGCAAAACCCAGGACCTATTCCGCAGGTGGCGCTCCATCCTGAATAAACTGACAC CCCAGATGTTCCAGCAGCTGATGAAGCAAGTGACGCAGCTGGCCATCGACACCGAGGACGCCTCAAAGGGGTCAT TGACCTCATTTTTGAGAAGGCCATTTCAGAGCCCAACTTCTCTGTGGCCTATCCAACATGTGCCGCTGCCTCATG GCGCTGAAAGTGCCCACTACGGAAAGCCAACAGTGACTGTGAACTTCCGAAAGCTGTTGTTGAATCGATGTCAGA CAGAGGAACGAGAACGCCTGAAGGAGGAGCTGGAAGAGGCTCGGGACATAGCCCGGCGCTGCTCTTTAGGGAATA TCAAGTTTATTGGAGAGTTGTTCAAACTGAAGATGTTAACAGAGGCAATAATGCATGACTGTGTGGTCAAACTGC TTAAGAACCATGATGAAGAGTCCCTTGAGTGCCTTTGTCGTCTGCTCACCACCATTGGCAAAGACCTGGACTTTG AAAAAGCCAAGCCCGAATGGATCAGTATTTCAACCAGATGGAAAAAATCATTAAAGAAAAGAAGACGTCATCCC GCATCCGCTTTATGCTGCAGGACGTGCTGGATCTGCGAGGGAGCAATTGGGTGCCACGCCGAGGGGATCAGGGTC CAAGACCATTGACCAGATCCATAAGGAGGCTGAGATGGAAGACATCGAGAGCACATCAAAGTGCAGCAGCTCATG CAAGGGCAGTGACAAGCGTCGGGGCGGTCCTCCAGGCCCTCCCATCAGCCGTGGACTTCCCCTTGTGGATGATGG TGGCTGACACAGTTCCCATCAGCAAAGGTAGCCGCCCCATTGACACCTCACGACTCACCAAGATCACCAAGCCTG GCTCCATCGATTCTAACAACCAGCTCTTTGCACCTGGAGGGCGACTGAGCTGGGGCAAGGGCAGCAGCGGAGGGT CAGGAGCCCAGCCCTCAGACGCAGCATCAGAAGCTGCTCGCCCAGCTACTAGTACTTTGATTCGCTTCTCAGCCC TTCAACAAGCGGTACCCACAGAAAGCACAGATAATAGACGTGTGGTGCAGAGGAGTAGCTTGAGCCGAGAACGAG GCGAGAAAGCTGGAGACCGAGGAGACCGCCTAGAGCGAGTGAACGGGGAGGGGACCGTGGGGACCGGCTTGATCG TGTCGCGGACACCTGCTACCAAGCGGACGTTCAGCAAGGAAGTGGAGGAGCGGAGTAGAGAACGGCCCTCCCAGC CTGAGGGGCTGCGCAAGGCAGCTAGCCTCACGGAGGATCGGGACCGTGGGCGGGATGCCGTGAAGCGAGAAGCTG CCCTACCCCAGTGAGCCCCCTGAAGGCGGCTCTCTCTGAGGAGGAGTTAGAGAAGAAATCCAAGGCTATCATTG

771/2682 FIGURE **706B**

TCATCTTTGTACGGCATGGTGTCGAGTCTACGCTGGAGCGCAGTGCCATTGCTCGTGAGCATATGGGGCAGCTGC TGCACCAGCTGCTCTGTGCTGGGCATCTGTCTACTGCTCAGTACTACCAAGGGTTGTATGAAATCTTGGAATTGG CTGAGGACATGGAAATTGACATCCCCCACGTGTGGCTCTACCTAGCGGAACTGGTAACACCCATTCTGCAGGAAG GTGGGGTGCCCATGGGGGAGCTGTTCAGGGAGATTACAAAGCCTCTGAGACCGTTGGGCAAAGCTGCTTCCCTGT TGCTGGAGATCCTGGGCCTCCTGTGCAAAAGCATGGGTCCTAAAAAGGTGGGGACGCTGTGGCGAGAAGCCGGGC TTAGCTGGAAGGAATTTCTACCTGAAGGCCAGGACATTGGTGCATTCGTCGCTGAACAGAAGGTGGAGTATACCC TGGGAGAGGAGTCGGAAGCCCCTGGCCAGAGGGCACTCCCCTCCGAGGAGCTGAACAGGCAGCTGGAGAAGCTGC CGTTAGTTCGAGCCCTCATGACGGCTGTCTGCTATTCTGCAATTATTTTTGAGACTCCCCTCCGAGTGGACGTTG CAGTGCTGAAAGGCGACATAGTGCTGCAGAAATACCTGTGTGACGAAGCAGAAGGAGCTACAGGCGCTCTACGCC TCCAGGCCCTTGTAGTGACCTTAGAACAGCCTCCCAACCTGCTGCGGATGTTCTTTGACGCACTGTATGACGAGG ACGTGGTGAAGGAGGATGCCTTCTACAGTTGGGAGAGTAGCAAGGACCCCGCTGAGCAGCAGGGCAAGGGTGTGG $\tt CCCTTAAATCTGTCACAGCCTTCTTCAAGTGGCTCCGTGAAGTCAGAGGAGGAGTC\underline{TGA}CCACAACTGAGGGCTG$ GTGGGGCCGGGGACCTGGAGCCCCATGGACACACAGATGGCTCCGGCTAGCCGCCTGGACTGCAGGGGGGGCGCA GCAGCGGCGGTGGCAGTGGCTGCCTGTAGTGTGTGTGTCTGAACTAATAAAGTGGCTGAAGAGGCAGGATGGCT TGGGGCTGCCTGGGCCCCCTCCAGGATGCCGCCAGGTGTCCCTCTCCCCTGGGGCACAGAGATATATTATA TATAAAGTCTTGAAAATTTTGAAATTTGGTGTGTCTTGGGGTGGGGAGGGGCACCAACGCCTGCCCCTGGGGTCC TTTTTTTTTTTTTTTGAAAATCACTCTCGGACTGCCGTCCTCGCTGCTGGGCATATGCCCCAGCCCCTGTACCAC CCCTGCTGTTGCCTGGGCAGGGGGAAGGGGGGGCACGGTGCCTGTAATTATTAAACATGAATTCAATT

772/2682 FIGURE 707

MSGARTASTPTPPQTGGSLEPQANGETPQVAVIVRPDDRSQGAIIADRPGLPGPEHSPSESQPSSPSPTPSPSPV LEPGSEPNLAVLSIPGDTMTTIQMSVEESTPISRETGEPYRLSPEPTPLAEPILEVEVTLSKPVPESEFSSSPLQ APTPLASHTVEIHEPNGMVPSEDLEPEVESSPELAPPPACPSESPVPIAPTAQPEELLNGAPSPPAVDLSPVSEP EEQAKEVTASVAPPTIPSATPATAPSATSPAQEEEMEEEEDEEEGEVGEAGEGESEKRGEELLPPESTPIPANLS QNLEAAAATQVAVSVPKRRRKIKELNKKEAVGDLLDAFKEANPAVPEVENQPPAGSNPGPESEGSGVPPRPEEAD ${\tt ETWDSKEDKIHNAENIQPGEQKYEYKSDQWKPPNLEEKKRYDREFLLGFQFIFCQMQKPEGLPHISDVVLDKANK}$ TPLRPLDPTRLQGINCGPDFTPSFANLGRTTLSTRGPPRGGPGGELARGAQAGLGPRRSQQGPRKEPRKIIATVL ${\tt MTEDIKLNKAEKAWKPSSKRTAADKDRGEEDADGSKTQDLFRRWRSILNKLTPQMFQQLMKQVTQLAIDTEDASK}$ GSLTSFLRRPFQSPTSLWPIQHVPLPHGAESAHYGKPTVTVNFRKLLLNRCQKEFEKDKDDDEVFEKKQKEMDEA ATAEERERLKEELEEARDIARRCSLGNIKFIGELFKLKMLTEAIMHDCVVKLLKNHDEESLECLCRLLTTIGKDL DFEKAKPRMDQYFNQMEKIIKEKKTSSRIRFMLQDVLDLRGSNWVPRRGDQGPRPLTRSIRRLRWKTSRAHQSAA AHARAVTSVGAVLQALPSAVDFPLWMMVADTVPISKGSRPIDTSRLTKITKPGSIDSNNQLFAPGGRLSWGKGSS GGSGAQPSDAASEAARPATSTLIRFSALQQAVPTESTDNRRVVQRSSLSRERGEKAGDRGDRLERVNGEGTVGTG LIVSRTPATKRTFSKEVEERSRERPSQPEGLRKAASLTEDRDRGRDAVKREAALPPVSPLKAALSEEELEKKSKA IIEEYLHLNDMKEAVQCVQELASPSLLFIFVRHGVESTLERSAIAREHMGQLLHQLLCAGHLSTAQYYQGLYEIL ELAEDMEIDIPHVWLYLAELVTPILQEGGVPMGELFREITKPLRPLGKAASLLLEILGLLCKSMGPKKVGTLWRE AGLSWKEFLPEGQDIGAFVAEQKVEYTLGEESEAPGQRALPSEELNRQLEKLLKEGSSNQRVFDWIEANLSEQIV SNTLVRALMTAVCYSAIIFETPLRVDVAVLKGDIVLQKYLCDEAEGATGALRLQALVVTLEQPPNLLRMFFDALY DEDVVKEDAFYSWESSKDPAEQQGKGVALKSVTAFFKWLREVRGGV

773/2682 FIGURE 708

GTAAAAGACCTCTACAAGGAGAGTTCAATGCGTAGCGGGAGCGGAGAGCTGACCCCAGAGAGCCCTGGGCAGCCC CACCTCCGCCGCCGGCCTAGTTACCATCACCCCGGAGAGCCCGCAGCTGCCGCAGCCGGCCCCAGTCACCATC $\mathtt{ACCGCAACC}$ GCCGACACCAAGCCCGGCACTACCGGAGCGGCGCAGGGAGCGGTGGCCCCGGGCGGCTCACATCGGCGGCGCTGGC GCGGGCGACAAGAAGGTCATCGCAACGAAGGTTTTGGGAACAGTAAAATGGTTCAATGTAAGGAACGGATATGGT TTCATCAACAGGAATGACACCAAGGAAGATGTATTTGTACACCAGACTGCCATAAAGAAGAATAACCCCAGGAAG TACCTTCGCAGTGTAGGAGATGGAGAGACTGTGGAGTTTGATGTTGTTGAAGGAGAAAAAGGGTGCGGAGGCAGCA AATGTTACAGGTCCTGGTGGTGTTCCAGTTCAAGGCAGTAAATATGCAGCAGACCGTAACCATTATAGACGCTAT CCACGTCGTAGGGGTCCTCCACGCAATTACCAGCAAAATTACCAGAATAGTGAGAGTGGGGAAAAGAACGAGGGA TCGGAGAGTGCTCCCGAAGCCAGGCCCAACAACGCCGGCCCTACGCAGGCGAAGGTTCCCACCTTACTACATGCG GAGACCTATGGGCGTCGACCACAGTATTCCAACCCTCCTGTGCAGGGAGAAGTGATGGAGGGTGCTGACAACCAG GGTGCAGGAGAACAAGGTAGACCAGTGAGGCAGATATGTATCGGGGGATATAGACCACGATTCCGCAGGGGCCCTC CTCGCCAAAAGACAGCCTAGAGAGGACGGCAATGAAGAAGATAAAGAAAATCAAGGAGATGAGACCCAAGGTCAG CAGCCACCTCAAGCTCGGTACCGCCGCAACTTCAATTACCGACGCAGACGCCCAGAAAACCCTAAACCACAAGAT GGCAAAGAGACAAAAGCAGCCGATCCACCAGCTGAGAATTCGTCCGCTCCCGAGGCTGAGCAGGGCGGGGCTGAG allambda all $\tt CTGCATTATCTATGCAGCATGGGGTTTTTATTATGTTTTACCTAAAGACGTCTCTTTTTGGTAATAACAAACCGT$ GTTTTTTAAAAAAGCCTGGTTTTTCTCAATACGCCTTTAAAGGAATTCC

774/2682 FIGURE 709

MSSEAETQQPPAAPPAAPALSAADTKPGTTGAAQGAVARAAHIGGAGAGDKKVIATKVLGTVKWFNVRNGYGFIN RNDTKEDVFVHQTAIKKNNPRKYLRSVGDGETVEFDVVEGEKGAEAANVTGPGGVPVQGSKYAADRNHYRRYPRR RGPPRNYQQNYQNSESGEKNEGSESAPEARPNNAGPTQAKVPTLLHAETYGRRPQYSNPPVQGEVMEGADNQGAG EQGRPVRQICIGDIDHDSAGALLAKRQPREDGNEEDKENQGDETQGQQPPQARYRRNFNYRRRPENPKPQDGKE TKAADPPAENSSAPEAEQGGAE

775/2682 FIGURE 710

GGTAAGAGAAGACTGGAAGCATGTCGGAGTTTTGGTTAATTTCTGCCCCTGGCGATAAGGAAAAATTTGCAAGCTC TGGAGAGGATGAATACTGTAACCTCCAAGTCCAACCTGTCTTATAATACCAAATTCGCTATTCCTGACTTCAAGG TGGGGACCTTGGATTCCCTGGTTGGCCTCTCTGATGAGTTGGGGAAACTCGACACCTTTGCTGAAAGCCTCATAA GGAGAATGGCTCAGAGCGTGGTGGAAGTCATGGAGGACTCAAAGGGGAAGGTCCAGGAGCACCTCCTGGCAAACG GAGTTGACTTAACATCCTTTGTGACCCACTTTGAATGGGACATGGCCAAATATCCTGTCAAGCAGCCGCTCGTGA GTGTGGTGGACACAATAGCCAAGCAACTGGCGCAGATCGAGATGGACCTGAAGTCCCGAACGGCCGCCTACGACA CTCTGAAGACAAACCTGGAGAACCTGGAAAAGAAATCCATGGGGAACCTCTTCACCCGGACACTGAGTGATATTG TGAGCAAAGAGGACTTCGTGCTGGATTCTGAATATCTCGTCACACTTCTGGTCATCGTCCCCAAACCAAACTACT CACAATGGCAAAAAACCTACGAATCTCTCTCAGACATGGTGGTCCCTCGATCAACCAAACTCATTACTGAGGACA AGGAAGGGGGCCTTTTCACTGTGACTCTGTTTCGAAAAGTGATTGAAGATTTCAAAACCAAGGCCAAAGAAAACA AGTTCACTGTTCGTGAATTTTACTATGATGAGAAGGAAATTGAAAGGGAAAGGGAGGAGATGGCCAGATTGCTGT CTGATAAGAAGCAACAGTATGGCCCCCTGCTGCGCTGGCTCAAGGTGAACTTCAGTGAAGCCTTCATTGCCTGGA TCCACATCAAGGCCCTGAGAGTGTTTGTGGAGTCCGTGCTCAGGTATGGACTACCAGTGAACTTCCAGGCAGTGC TCCTGCAGCCGCATAAGAAGTCATCCACCAAGCGTTTAAGAGAGGTTCTAAACTCTGTCTTCCGACATCTGGATG AAGTAGCCGCTACAAGTATACTGGATGCATCTGTGGAGATCCCGGGACTGCAACTCAATAACCAAGACTATTTTC $\tt CTTATGTCTACTTCCATATTGACCTTAGTCTTCTTGAC \\ \underline{\textbf{TAG}} \textbf{AAAGGCCAGCTGGCACCTCTGTCTCATGTTCGTG}$ CAGATTATTACAGACACCTCTTTCCTTTAGCCAGAGAATGGTTCAAATGTCTTACAGAACTAAGATCTTTTTCAG AATGTTCCAACAAATTCAAAACTTCATTTTCTGAATGTTTTACATAAATGCGAACTACCTGTTCGCATTGGTAAC CTGCTGCTGTATTTCATGTCTTAACGGCTATTTTGAGGTTCATTAACAACATAGAAAGCCTTGAACTGTATAACC AGCTAGATTCCTTAATAATTAGTCACTAGAGACAGCCCAAAGACAAATATTGGGCAGGAAATCAGTTCTCACTGA GCCCGGTTTCCATGTAAAATCTCTGTTGTGGTGGGCATAGGTGGCACCATCTAAAGAAAAAGAGGTCTTGTTTTTT GTTTAAAAAAGTTTGTGGGGAGGAAAGACATCTGTGTATCACTTCAAAATATTGATTTACTGCTAAACATCACTC TGAATTTATGATGTGGATACTTAACTTCATACATTTATCGGCATTGTCCAAAATATTTTATTCTTTAATGGAAAAA CAGCAGTCAGAGAGAAAAATGTTTCGACAGCCAAGTTTTCTTCAAAATATTATGTGACAGAATACGACTCAATTC ACCGGCTACAACAATTCATAGAATTTTTCAATGTTTTCTTGAGATGCAAAAGTTCACTGTTGCAGTGTTTTCAAA TGACCAATCAAGTACTACTTCTTGGTTAAAAGGCCACTGGTAGAGTCATCTGAGTGTAGAGAATGTCCCTTCACT GCTGGAAAAATCCACTGGCTCCCAAGAAAAGAAAATGGTCTGAAGCCTCTGTTGTGGCTCTCACAACTCATCTTT CCCTAAGTCATCAAGCTCCACATCACTGAGGTCAATGTCATCCTCCACGGGAAGCTGGGAGACGACAGAAAGCCA CTGTTAGATCTGCAGAAGGGGACACCCTGGAAGGTCAACATCTCATTTTATGGAAGAGCGACTCTCTGGAGCTAC TCCTGCTACAATCCAGGTTCTCCTCAGTCTGACTCCTACCCTGACCTTCGTACCTATGATTATACGGATGGAAAA TTTTGAGGAGGGTGGGACACAACAGTACAGAAATAAGTGCTAATTTCAAAGCTATCATTTTCTATTTTTCTAAGA TAAAGTAAATGAATTCCAGGTTAAATGTTCACTTTAAGGTAATAATCAGGAAAGCAACCTTACTACTGAAATGTA TCTTGGCTGTCAAGAGTATCAAATGCCATGCAGCACTTAAACTTGTGATAAGGAAGATGAAGGGTCTTCAGAGAA GAACCTCTTAAAAGGCCCACGGGTGCACCAGGGCTGAGGTCTGATGGGAAGGACTTGACTCCAGGTGCAGAGATG CGTCCCAAGGCTCTCTCTCAACGATGGTAGGGAAAGCCCCGCCTCCTACAGGTGCCGTGGAGCCACGCCCAAAAG AGAGCTCCCTTAGGGAAAAATGACCAAAACACACACACATTTACAATGGACTGCTGGTGCAGAAGAATAAACA ACTTTAAAAATAAAAAAAAAAAAAAAAAAAAAAAA

776/2682 FIGURE 711

MSEFWLISAPGDKENLQALERMNTVTSKSNLSYNTKFAIPDFKVGTLDSLVGLSDELGKLDTFAESLIRRMAQSV VEVMEDSKGKVQEHLLANGVDLTSFVTHFEWDMAKYPVKQPLVSVVDTIAKQLAQIEMDLKSRTAAYDTLKTNLE NLEKKSMGNLFTRTLSDIVSKEDFVLDSEYLVTLLVIVPKPNYSQWQKTYESLSDMVVPRSTKLITEDKEGGLFT VTLFRKVIEDFKTKAKENKFTVREFYYDEKEIEREREEMARLLSDKKQQYGPLLRWLKVNFSEAFIAWIHIKALR VFVESVLRYGLPVNFQAVLLQPHKKSSTKRLREVLNSVFRHLDEVAATSILDASVEIPGLQLNNQDYFPYVYFHI DLSLLD

777/2682 FIGURE 712

CTGCCACTGCCACCTCGCGGATCAGGAGCCAGCGTTGTTCGCCCGACGCCTCGCTGCCGGTGGGAGGAAGCGAGA CCGATTCAAAAGGTGATGACCTATCAACAGCCATTCTCAAACAGAAGAACCGTCCCAATCGGTTAATTGTTGATG ACACAGTGTTGCTGAAAGGAAAGAAGAGAGAGAGAGAGATGTTTGCATCGTCCTTTCTGATGATACTTGTTCTGATG AGAAGATTCGGATGAATAGAGTTGTTCGGAATAACCTTCGTGTACGCCTAGGGGATGTCATCAGCATCCAGCCAT GCCCTGATGTGAAGTACGGCAAACGTATCCATGTGCTGCCCATTGATGACACAGTGGAAGGCATTACTGGTAATC TCTTCGAGGTATACCTTAAGCCGTACTTCCTGGAAGCGTATCGACCCATCCGGAAAGGAGACATTTTTCTTGTCC GTGGTGGGATGCGTGCTGTGGAGTTCAAAGTGGTGGAAACAGATCCTAGCCCTTATTGCATTGTTGCTCCAGACA ACATTGGTGGCTGCAGGAAGCAGCTAGCTCAGATCAAAGAGATGGTGGAACTGCCCCTGAGACATCCTGCCCTCT TTAAGGCAATTGGTGTGAAGCCTCCTAGAGGAATCCTGCTTTACGGACCTCCTGGAACAGGAAAGACCCTGATTG CTCGAGCTGTAGCAAATGAGACTGGAGCCTTCTTCTTCTTGATCAATGGTCCTGAGATCATGAGCAAATTGGCTG GTGAGTCTGAGAGCAACCTTCGTAAAGCCTTTGAGGAGGCTGAGAAGAATGCTCCTGCCATCATCTTCATTGATG AGCTAGATGCCATCGCTCCCAAAAGAGAGAAAACTCATGGCGAGGTGGAGCGGCGCATTGTATCACAGTTGTTGA CAGCTCTACGGCGATTTGGTCGCTTTGACAGGGÄGGTAGATATTGGAATTCCTGATGCTACAGGACGCTTAGAGA TTCTTCAGATCCATACCAAGAACATGAAGCTGGCAGATGATGTGGACCTGGAACAGGTAGCCAATGAGACTCACG GGCATGTGGGTGCTGACTTAGCAGCCCTGTGCTCAGAGGCTGCTCTGCAAGCCATCCGCAAGAAGATGGATCTCA TTGACCTAGAGGATGAGACCATTGATGCCGAGGTCATGAACTCTCTAGCAGTTACTATGGATGACTTCCGGTGGG CCTTGAGCCAGAGTAACCCATCAGCACTGCGGGAAACCGTGGTAGAGGTGCCACAGGTAACCTGGGAAGACATCG GGGGCCTAGAGGATGTCAAACGTGAGCTACAGGAGCTGGTCCAGTATCCTGTGGAGCACCCCAGACAAATTCCTGA AGTTTGGCATGACACCTTCCAAGGGAGTTCTGTTCTATGGACCTCCTGGCTGTGGGAAAACTTTGTTGGCCAAAG CCATTGCTAATGAATGCCAGGCCAACTTCATCTCCATCAAGGGTCCTGAGCTGCTCACCATGTGGTTTGGGGAGT CTGAGGCCAATGTCAGAGAAATCTTTGACAAGGCCCGCCAAGCTGCCCCCTGTGTGCTATTCTTTGATGAGCTGG ATTCGATTGCCAAGGCTCGTGGAGGTAACATTGGAGATGGTGGTGGGGGCTGCTGACCGAGTCATCAACCAGATCC TGACAGAAATGGATGGCATGTCCACAAAAAAAAATGTGTTCATCATTGGCGCTACCAACCGGCCTGACATCATTG ATCCTGCCATCCTCAGACCTGGCCGTCTTGATCAGCTCATCTACATCCCACTTCCTGATGAGAAGTCCCGTGTTG CCATCCTCAAGGCTAACCTGCGCAAGTCCCCAGTTGCCAAGGATGTGGACTTGGAGTTCCTGGCTAAAATGACTA ATGGCTTCTCTGGAGCTGACCTGACAGAGATTTGCCAGCGTGCTTGCAAGCTGGCCATCCGTGAATCCATCGAGA GTGAGATTAGGCGAGAACGAGAGGGCAGACAAACCCATCAGCCATGGAGGTAGAAGAGGATGATCCAGTGCCTG AGATCCGTCGAGATCACTTTGAAGAAGCCATGCGCTTTGCGCGCCGTTCTGTCAGTGACAATGACATTCGGAAGT ATGAGATGTTTGCCCAGACCCTTCAGCAGAGTCGGGGCTTTGGCAGCTTCAGATTCCCTTCAGGGAACCAGGGTG GAGCTGGCCCCAGTCAGGGCAGTGGAGGCGGCACAGGTGGCAGTGTATACACAGAAGACAATGATGATGACCTGT CCAGGAGAGGGGCCCAGGGGGGGCCCACAGCCTGCTCCATTCTCCAGTCTGAACAGTTCAGCTACAGTCTGACTC TGGACAGGGGGTTTCTGTTGCAAAAATACAAAACAAAAGCGATAAAATAAAAGCGATTTTCATTTGGTAGGCGGA GAGTGAATTACCAACAGGGAATTGGGCCTTGGGCCTATGCCATTTCTGTTGTAGTTTGGGGCAGTGCAGGGGACC TGTGTGGGGTGTGAACCAAGGCACTACTGCCACCTGCCACAGTAAAGCATCTGCACTTGACTCAATGCTGCCCGA GCCCTCCCTTCCCCCTATCCAACCTGGGTAGGTGGGTAGGGGCCACAGTTGCTGGATGTTTATATAGAGAGTAGG TTGATTTATTTTACATGCTTTTGAGTTAATGTTGGAAAACTAATCACAAGCAGTTTCTAAACCAAAAAATGACAT

778/2682 FIGURE 713

MASGADSKGDDLSTAILKQKNRPNRLIVDEAINEDNSVVSLSQPKMDELQLFRGDTVLLKGKKRREAVCIVLSDD
TCSDEKIRMNRVVRNNLRVRLGDVISIQPCPDVKYGKRIHVLPIDDTVEGITGNLFEVYLKPYFLEAYRPIRKGD
IFLVRGGMRAVEFKVVETDPSPYCIVAPDTVIHCEGEPIKREDEEESLNEVGYDDIGGCRKQLAQIKEMVELPLR
HPALFKAIGVKPPRGILLYGPPGTGKTLIARAVANETGAFFFLINGPEIMSKLAGESESNLRKAFEEAEKNAPAI
IFIDELDAIAPKREKTHGEVERRIVSQLLTLMDGLKQRAHVIVMAATNRPNSIDPALRRFGRFDREVDIGIPDAT
GRLEILQIHTKNMKLADDVDLEQVANETHGHVGADLAALCSEAALQAIRKKMDLIDLEDETIDAEVMNSLAVTMD
DFRWALSQSNPSALRETVVEVPQVTWEDIGGLEDVKRELQELVQYPVEHPDKFLKFGMTPSKGVLFYGPPGCGKT
LLAKAIANECQANFISIKGPELLTMWFGESEANVREIFDKARQAAPCVLFFDELDSIAKARGGNIGDGGGAADRV
INQILTEMDGMSTKKNVFIIGATNRPDIIDPAILRPGRLDQLIYIPLPDEKSRVAILKANLRKSPVAKDVDLEFL
AKMTNGFSGADLTEICQRACKLAIRESIESEIRRERERQTNPSAMEVEEDDPVPEIRRDHFEEAMRFARRSVSDN
DIRKYEMFAQTLQQSRGFGSFRFPSGNQGGAGPSQGSGGGTGGSVYTEDNDDDLYG

779/2682 FIGURE **714**

GGATCGAGGGGACTCTGACCACAGCCTGTGGCTGGGAAGGGGAGACAGAGGCGGCGGCGGCTCAGGGGAAACGAGG CTGCAGTGGTGGTAGTAGGAAGATGTCGGGCGAGGACGAGCAACAGGAGCAAACTATCGCTGAGGACCTGGTCGT GACCAAGTATAAGATGGGGGGCGACATCGCCAACAGGGTACTTCGGTCCTTGGTGGAAGCATCTAGCTCAGGTGT GGAAATGAAGAAAGGTATTGCTTTTCCCACCAGCATTTCGGTAAATAACTGTGTATGTCACTTCTCCCCTTTGAA GAGCGACCAGGATTATATTCTCAAGGAAGGTGACTTGGTAAAAATTGACCTTGGGGTCCATGTGGATGGCTTCAT CGCTAATGTAGCTCACACTTTTGTGGTTGATGTAGCTCAGGGGACCCAAGTAACAGGGAGGAAAGCAGATGTTAT TAAGGCAGCTCACCTTTGTGCTGAAGCTGCCCTACGCCTGGTCAAACCTGGAAATCAGAACACACAAGTGACAGA AGCCTGGAACAAAGTTGCCCACTCATTTAACTGCACGCCAATAGAAGGTATGCTGTCACACCAGTTGAAGCAGCA TGTCATCGATGGAGAAAAAACCATTATCCAGAATCCCACAGACCAGCAGAAGAAGAAGACCATGAAAAAGCTGAATT TGAGGTACATGAAGTATATGCTGTGGATGTTCTCGTCAGCTCAGGAGAGGGCCAAGGCCAAGGATGCAGGACAGAG AACCACTATTTACAAACGAGACCCCTCTAAACAGTATGGACTGAAAATGAAAACTTCACGTGCCTTCTTCAGTGA GGTGGAAAGGCGTTTTGATGCCATGCCGTTTACTTTAAGAGCATTTGAAGATGAGAAGAAGGCTCGGATGGGTGT GGTGGAGTGCGCCAAACATGAACTGCTGCAACCATTTAATGTTCTCTATGAGAAGGAGGGTGAATTTGTTGCCCA GTTTAAATTTACAGTTCTGCTCATGCCCAATGGCCCCATGCGGATAACCAGTGGTCCCTTCGAGCCTGACCTCTA CAAGTCTGAGATGGAGGTCCAGGATGCAGAGCTAAAGGCCCTCCTCCAGAGTTCTGCAAGTCGAAAAACCCAGAA AAAGAAAAAAAGAAGGCCTCCAAGACTGCAGAGAATCCCACCAGTGGGGAAACATTAGAAGAAAATGAAGCTGG GGACTGAGGTGCGTCCCATCTCCCCAGCTTGCTGCTCCTGCCTCATCCCCTTCCCACCAAACCCCAGACTCTGTG AAGTGCAGTTCTTCTCCACCTAGGACCGCCAGCAGAGCGGGGGGATCTCCCTGCCCCCACCCCAGTTCCCCAACC CACTCCCTTCCAACAACAACCAGCTCCAACTGACTCTGGTCTTGGGAGGTGAGGCTTCCCAACCACGGAAGACTA CTTTAAACGAAAAAAAGAAATTGAATAATAAAATCAGGAGTCAAAATTCATCGTCTTCAAGGCCCCTCTTTCTAG CCTTTTCTACTACTCTCTGCTTGGTCAAGGTTTGTGCCCCCACTACAGAACAGGGCTAAATTAGCCACCACCACTG AAAACTCAGCCGAATTTTTTTATACCACTCTGACGTCAGCATTTTTT

780/2682 FIGURE 715

MSGEDEQQEQTIAEDLVVTKYKMGGDIANRVLRSLVEASSSGVSVLSLCEKGDAMIMEETGKIFKKEKEMKKGIA FPTSISVNNCVCHFSPLKSDQDYILKEGDLVKIDLGVHVDGFIANVAHTFVVDVAQGTQVTGRKADVIKAAHLCA EAALRLVKPGNQNTQVTEAWNKVAHSFNCTPIEGMLSHQLKQHVIDGEKTIIQNPTDQQKKDHEKAEFEVHEVYA VDVLVSSGEGKAKDAGQRTTIYKRDPSKQYGLKMKTSRAFFSEVERRFDAMPFTLRAFEDEKKARMGVVECAKHE LLQPFNVLYEKEGEFVAQFKFTVLLMPNGPMRITSGPFEPDLYKSEMEVQDAELKALLQSSASRKTQKKKKKKAS KTAENPTSGETLEENEAGD

781/2682 FIGURE **716**

782/2682 FIGURE 717

 ${\tt MSSGNAKIGHPAPNFKATAVMPDGQFKDISLSDYKGKYVVFFFYPLDFTFVCPTEIIAFSDRAEEFKKLNCQVIG} \\ {\tt ASVDSHFCHLAWVNTPKKQGGLGPMNIPLVSDPKRTIAQDYGVLKADEGISFRGLFIIDDKGILRQITVNDLPVG} \\ {\tt RSVDETLRLVQAFQFTDKHGEVCPAGWKPGSDTIKPDVQKSKEYFSKQK} \\ {\tt MSSGNAKIGHPAPNFKATAVMPDGQFKDISLSDYKGKYVFFYPLDFTFVCPTEIIAFSDRAEEFKKLNCQVIGNE ASVDSHFCHLAWVNTPKKQGGLGPMNIPLVSDPKRTIAQDYGVLKADEGISFRGLFIIDDKGILRQITVNDLPVG RSVDETLRLVQAFQFTDKHGEVCPAGWKPGSDTIKPDVQKSKEYFSKQK \\ {\tt MSSGNAKIGHPAPNFKATAVMPDGQFKDISLSDYKGKYVVFFFYPLDFTFVCPTEIIAFSDRAEEFKKLNCQVIGNE ASVDSHFCHLAWVNTPKATAVMPDGQFKDISLSDYKGKYVVFFFYPLDFTFVCPTEIIAFSDRAEEFKKLNCQVIGNE ASVDSHFCHLAWVNTPKATAVMPDGQFKDISLSDYKGKYVVFFFYPLDFTFVCPTEIIAFSDRAEEFKKLNCQVIGNE ASVDSHFCHLAWVNTPKATAVMPDGQFKDISLSDYKGKYVFFTYNCH ASVDSHFCHLAWVNTPKATAVMPDGQFKDISLSDYKFTYNCH ASVDSHFTYNCH ASVDSHFTYNCH$

783/2682 FIGURE 718A

 ${\tt CGGGTGGCGGCTCGGGACGGGGCGCGCTAGTGTTCTTCTGTGTGGCAGTTCAGA}{{\tt ATG}{\tt A$ CAGCATTCTCTAACTTGTTTGGTGGAGAACCATTGTCATATACCCGGTTCAGCCTGGCTCGGCAAGTAGATGGCG ATAACAGTCATGTGGAGATGAAACTTGCTGTAGATGAAGAAGAAAATGCTGACAATAACACAAAGGCCAATGTCA CAAAACCAAAAAGGTGTAGTGGAAGTATCTGCTATGGGACTATTGCTGTGATCGTCTTTTTCTTGATTGGATTTA TGATTGGCTACTTGGGCTATTGTAAAGGGGTAGAACCAAAAACTGAGTGTGAGAGACTGGCAGGAACCGAGTCTC CAGTGAGGGAGGAGCCAGGAGGAGCTCCCTGCAGCACGTCGCTTATATTGGGATGACCTGAAGAAAGTTGT CTGGATCTCAAAAAGATGAAAATCTTGCGTTGTATGTTGAAAATCAATTTCGTGAATTTAAACTCAGCAAAGTCT GGCGTGATCAACATTTTGTTAAGATTCAGGTCAAAGACAGCGCTCAAAACTCGGTGATCATAGTTGATAAGAACG GTAGACTTGTTTACCTGGTGGAGAATCCTGGGGGTTATGTGGCGTATAGTAAGGCTGCAACAGTTACTGGTAAAC TGGTCCATGCTAATTTTGGTACTAAAAAAGATTTTGAGGATTTATACACTCCTGTGAATGGATCTATAGTGATTG TCAGAGCAGGGAAAATCACCTTTGCAGAAAAGGTTGCAAATGCTGAAAGCTTAAATGCAATTGGTGTTGATAT ACATGGACCAGACTAAATTTCCCATTGTTAACGCAGAACTTTCATTCTTTGGACATGCTCATCTGGGGACAGGTG ACCCTTACACACCTGGATTCCCTTCCTTCAATCACACTCAGTTTCCACCATCTCGGTCATCAGGATTGCCTAATA TACCTGTCCAGACAATCTCCAGAGCTGCTGCAGAAAAGCTGTTTGGGAATATGGAAGGAGACTGTCCCTCTGACT GGAAAACAGACTCTACATGTAGGATGGTAACCTCAGAAAGCAAGAATGTGAAGCTCACTGTGAGCAATGTGCTGA AAGAGATAAAAATTCTTAACATCTTTGGAGTTATTAAAGGCTTTGTAGAACCAGATCACTATGTTGTAGTTGGGG CCCAGAGAGATGCATGGGGCCCTGGAGCTGCAAAATCCGGTGTAGGCACAGCTCTCCTATTGAAACTTGCCCAGA TGTTCTCAGATATGGTCTTAAAAGATGGGTTTCAGCCCAGCAGAAGCATTATCTTTGCCAGTTGGAGTGCTGGAG ACTTTGGATCGGTTGGTGCCACTGAATGGCTAGAGGGATACCTTTCGTCCCTGCATTTAAAGGCTTTCACTTATA TTAATCTGGATAAAGCGGTTCTTGGTACCAGCAACTTCAAGGTTTCTGCCAGCCCACTGTTGTATACGCTTATTG AGAAAACAATGCAAAATGTGAAGCATCCGGTTACTGGGCAATTTCTATATCAGGACAGCAACTGGGCCAGCAAAG TTTGCGAGGACACAGATTATCCTTATTTGGGTACCACCATGGACACCTATAAGGAACTGATTGAGAGGATTCCTG AGTTGAACAAAGTGGCACGAGCAGCTGCAGAGGTCGCTGGTCAGTTCGTGATTAAACTAACCCATGATGTTGAAT TGAACCTGGACTATGAGAGGTACAACAGCCAACTGCTTTCATTTGTGAGGGATCTGAACCAATACAGAGCAGACA TAAAGGAAATGGGCCTGAGTTTACAGTGGCTGTATTCTGCTCGTGGAGACTTCTTCCGTGCTACTTCCAGACTAA CAACAGATTTCGGGAATGCTGAGAAAACAGACAGATTTGTCATGAAGAAACTCAATGATCGTGTCATGAGAGTGG AGTATCACTTCCTCTCCCTACGTATCTCCAAAAGAGTCTCCTTTCCGACATGTCTTCTGGGGCTCCGGCTCTC ACACGCTGCCAGCTTTACTGGAGAACTTGAAACTGCGTAAACAAAATAACGGTGCTTTTAATGAAACGCTGTTCA GAAACCAGTTGGCTCTAGCTACTTGGACTATTCAGGGAGCTGCAAATGCCCTCTCTGGTGACGTTTGGGACATTG TCGTGCTAAATTTTCAGTAGGGCTACAAAACCTGATGTTAAAATTCCATCCCATCATCTTGGTACTACTAGATGT CTTTAGGCAGCAGCTTTTAATACAGGGTAGATAACCTGTACTTCAAGTTAAAAGTGAATAACCACTTAAAAAATGT CCATGATGGAATATTCCCCTATCTCTAGAATTTTAAGTGCTTTGTAATGGGAACTGCCTCTTTCCTGTTGTTGTT AATGAAAATGTCAGAAACCAGTTATGTGAATGATCTCTCTGAATCCTAAGGGCTGGTCTCTGCTGAAGGTTGTAA GTGGTCGCTTACTTTGAGTGATCCTCCAACTTCATTTGATGCTAAATAGGAGATACCAGGTTGAAAGACCTTCTC AGAGATGGGCTTGTTTTCTTGCCAATGAGGTCTGAAATGGAGGTCCTTCTGCTGGATAAAATGAGGTTCAACTGT TGATTGCAGGAATAAGGCCTTAATATGTTAACCTCAGTGTCATTTATGAAAAGAGGGGACCAGAAGCCAAAGACT AGCACATTGAAAGAGAACCAGTTTCAGGTGTTTAGTTGCAGACTCAGTTTGTCAGACTTTAAAGAATAATATGCT TTATCAGTGACAGAGTTCACTATAAATGGTGTTTTTTTAATAGAATATAATTATCGGAAGCAGTGCCTTCCATAA TTATGACAGTTATACTGTCGGTTTTTTTTAAATAAAAGCAGCATCTGCTAATAAAACCCAACAGATACTGGAAGT TTTGCATTTATGGTCAACACTTAAGGGTTTTAGAAAACAGCCGTCAGCCAAATGTAATTGAATAAAGTTGAAGCT AAGATTTAGAGATGAATTAAATTTAATTAGGGGTTGCTAAGAAGCGAGCACTGACCAGATAAGAATGCTGGTTTT CCTAAATGCAGTGAATTGTGACCAAGTTATAAATCAATGTCACTTAAAGGCTGTGGTAGTACTCCTGCAAAATTT

784/2682 FIGURE 718B

TATAGCTCAGTTTATCCAAGGTGTAACTCTAATTCCCATTTTGCAAAATTTCCAGTACCTTTGTCACAATCCTAA TGCAATGACATCTTCAAAGCTTGAAGATCGTTAGTATCTAACATGTATCCCAACTCCTATAATTCCCTATCTTTT TACAAAATTTGAAATTTAGCTTGGGTTTTTGTTACCTTTATGGTTTCTCCAGGTCCTCTACTTAATGAGATAGTA GCATACATTTATAATGTTTGCTATTGACAAGTCATTTTAACTTTATCACATTATTTGCATGTTACCTCCTATAAA CTTAGTGCGGACAAGTTTTAATCCAGAATTGACCTTTTGACTTAAAGCAGGGGGACTTTGTATAGAAGGTTTGGG GGCTGTGGGGAAGGAGTCCCCTGAAGGTCTGACACGTCTGCCTACCCATTCGTGGTGATCAATTAAATGTAGG TATGAATAAGTTCGAAGCTCCGTGAGTGAACCATCATTATAAACGTGATGATCAGCTGTTTGTCATAGGGCAGTT GGAAACGGCCTCCTAGGGAAAAGTTCATAGGGTCTCTTCAGGTTCTTAGTGTCACTTACCTAGATTTACAGCCTC ACTTGAATGTGTCACTACTCACAGTCTCTTTAATCTTCAGTTTTTATCTTTAATCTCCTCTTTTTATCTTGGACTGA CATTTAGCGTAGCTAAGTGAAAAGGTCATAGCTGAGATTCCTGGTTCGGGTGTTACGCACACGTACTTAAATGAA AACCCTTTTCTACAGTTAGGGTTGAGTTACTTCCTATCAAGCCAGTACGTGCTAACAGGCTCAATATTCCTGAAT GAAATATCAGACTAGTGACAAGCTCCTGGTCTTGAGATGTCTTCTCGTTAAGGAGATGGGCCTTTTGGAGGTAAA GGATAAAATGAATGAGTTCTGTCATGATTCACTATTCTAGAACTTGCATGACCTTTACTGTGTTAGCTCTTTGAA TGTTCTTGAAATTTTAGACTTTCTTTGTAAACAAATAATATGTCCTTATCATTGTATAAAAAGCTGTTATGTGCAA

785/2682 FIGURE **719**

MMDQARSAFSNLFGGEPLSYTRFSLARQVDGDNSHVEMKLAVDEEENADNNTKANVTKPKRCSGSICYGTIAVIV
FFLIGFMIGYLGYCKGVEPKTECERLAGTESPVREEPGEDFPAARRLYWDDLKRKLSEKLDSTDFTGTIKLLNEN
SYVPREAGSQKDENLALYVENQFREFKLSKVWRDQHFVKIQVKDSAQNSVIIVDKNGRLVYLVENPGGYVAYSKA
ATVTGKLVHANFGTKKDFEDLYTPVNGSIVIVRAGKITFAEKVANAESLNAIGVLIYMDQTKFPIVNAELSFFGH
AHLGTGDPYTPGFPSFNHTQFPPSRSSGLPNIPVQTISRAAAEKLFGNMEGDCPSDWKTDSTCRMVTSESKNVKL
TVSNVLKEIKILNIFGVIKGFVEPDHYVVVGAQRDAWGPGAAKSGVGTALLLKLAQMFSDMVLKDGFQPSRSIIF
ASWSAGDFGSVGATEWLEGYLSSLHLKAFTYINLDKAVLGTSNFKVSASPLLYTLIEKTMQNVKHPVTGQFLYQD
SNWASKVEKLTLDNAAFPFLAYSGIPAVSFCFCEDTDYPYLGTTMDTYKELIERIPELNKVARAAAEVAGQFVIK
LTHDVELNLDYERYNSQLLSFVRDLNQYRADIKEMGLSLQWLYSARGDFFRATSRLTTDFGNAEKTDRFVMKKLN
DRVMRVEYHFLSPYVSPKESPFRHVFWGSGSHTLPALLENLKLRKQNNGAFNETLFRNQLALATWTIQGAANALS
GDVWDIDNEF

786/2682 FIGURE **720**

GTCACTCGTATAAAAACCTATGCTTTGAAGGTTCTCGTGTGTCTCGGCCTGCAGGTCTCGCTCAGAGCTGTGTCC CTCCCGAACCGGAGAAAACCTTCGGCGGGGTCCTTCCGGGTTTTGTGTCGAATCTGCGGCGGCGACCCGGCGCCCG CGTCACGCGGTGGTGAATGTGCGGCAGTACGCGCGCGCGTCGTTTACGCGGCGATTTCATCATGCTCCGAGCCG GCGGCGCGCCGCTTCCGTCGCCACCCTCTCTGGACAGCCCAGGGCCGCAGGCTCATGCCCTCTCCGCGTCCAG TGCTGCTTAGAGGTGCTCGCGCCCCTCTGCTGCTGCTGCCGCCCCGGCTCTTAGCCCGACCCTCGCTCCTCC GCGCGGGGGCTGAGGAGGTGCTGGCACCTCTGAGGCTAGCAGTGCGCCAGCAGGAGATCTTGTGCGAAAACTCA AAGAAGATAAAGCACCCCAAGTAGACGTAGACAAAGCAGTGGCTGAGCTCAAAGCCCGCAAGAGGGTTCTGGAAG CAAAGGAGCTGGCGTTACAGCCCAAAGATGATATTGTAGACCGAGCAAAAATGGAAGATACCCTGAAGAGAGGG TTTTCTATGATCAAGCTTTTGCTATTTATGGAGGTGTTAGTGGTCTGTATGACTTTGGGCCAGTTGGCTGTCTT TGAAGAACAATATTATTCAGACCTGGAGGCAGCACTTTATCCAAGAGGAACAGATCCTGGAGATCGATTGCACCA TGCTCACCCCTGAGCCAGTTTTAAAGACCTCTGGCCATGTAGACAAATTTGCTGACTTCATGGTGAAAAGACGTAA AAAATGGAGAATGTTTTCGTGCTGACCATCTATTAAAAGCTCATTTACAGAAATTGATGTCTGATAAGAAGTGTT CTGTCGAAAAGAAATCAGAAATGGAAAGTGTTTTGGCCCAGCTTGATAACTATGGACAGCAAGAACTTGCGGATC TTTTTGTGAACTATAATGTAAAATCTCCCATTACTGGAAATGATCTATCCCCTCCAGTGTCTTTTAACTTAATGT TCAAGACTTTCATTGGGCCTGGAGGAAACATGCCTGGGTACTTGAGACCAGAAACTGCACAGGGGATTTTCTTGA ATTTCAAACGACTTTTGGAGTTCAACCAAGGAAAGTTGCCTTTTGCTGCTGCCCAGATTGGAAATTCTTTTAGAA ATGAGATCTCCCCTCGATCTGGACTGATCAGAGTCAGAGAATTCACAATGGCAGAAATTGAGCACTTTGTAGATC CCAGTGAGAAAGACCACCCCAAGTTCCAGAATGTGGCAGACCTTCACCTTTATTTGTATTCAGCAAAAGCCCAGG TCAGCGGACAGTCCGCTCGGAAAATGCGCCTGGGAGATGCTGTTGAACAGGGTGTGATTAATAACACAGTATTAG GCTATTTCATTGGCCGCATCTACCTCTACCTCACGAAGGTTGGAATATCTCCAGATAAACTCCGCTTCCGGCAGC ACATGGAGAATGAGATGGCCCATTATGCCTGTGACTGTTGGGATGCAGAATCCAAAACATCCTACGGTTGGATTG AGATTGTTGGATGTGCTGATCGTTCCTGTTATGACCTCTCCTGTCATGCACGAGCCCACCAAAGTCCCACTTGTAG CTGAGAAACCTCTGAAAGAACCCAAAACAGTCAATGTTGTTCAGTTTGAACCCAGTAAGGGAGCAATTGGTAAGG CATATAAGAAGGATGCAAAACTGGTGATGGAGTATCTTGCCATTTGTGATGAGTGCTACATTACAGAAATGGAGA TGCTGCTGAATGAGAAAGGGGAATTCACAATTGAAACTGAAGGGAAAACATTTCAGTTAACAAAAGACATGATCA GTAGGATCATGTATACGGTATTTGAACATACATTCCATGTACGAGAAGGAGATGAACAGAGAACATTCTTCAGTT TCCCTGCTGTAGTTGCTCCATTCAAATGTTCCGTCCTCCCACTGAGCCAAAACCAGGAGTTCATGCCATTTGTCA AGGAATTATCGGAAGCCCTGACCAGGCATGGAGTATCTCACAAAGTAGACGATTCCTCTGGGTCAATCGGAAGGC GCTATGCCAGGACTGATGAGATTGGCGTGGCTTTTGGTGTCACCATTGACTTTGACACAGTGAACAAGACCCCCC ACACTGCAACTCTGAGGGACCGTGACTCAATGCGGCAGATAAGAGCAGAGATCTCTGAGCTGCCCAGCATAGTCC AAGACCTAGCCAATGGCAACATCACATGGGCTGATGTGGAGGCCAGGTATCCTCTGTTTGAAGGGCAAGAGACTG CTACTCTTATGTCCACTTTACAAAAGAAAACAGCATTGTGATTACTCCCAGGGACCGTATTTTATCTTCAGTGGC TGCCTGATTTTACCCCCACAATTAAAGTTGAAGGAATCCTGA

787/2682 FIGURE 721

MDGAGAEEVLAPLRLAVRQQGDLVRKLKEDKAPQVDVDKAVAELKARKRVLEAKELALQPKDDIVDRAKMEDTLK
RRFFYDQAFAIYGGVSGLYDFGPVGCALKNNIIQTWRQHFIQEEQILEIDCTMLTPEPVLKTSGHVDKFADFMVK
DVKNGECFRADHLLKAHLQKLMSDKKCSVEKKSEMESVLAQLDNYGQQELADLFVNYNVKSPITGNDLSPPVSFN
LMFKTFIGPGGNMPGYLRPETAQGIFLNFKRLLEFNQGKLPFAAAQIGNSFRNEISPRSGLIRVREFTMAEIEHF
VDPSEKDHPKFQNVADLHLYLYSAKAQVSGQSARKMRLGDAVEQGVINNTVLGYFIGRIYLYLTKVGISPDKLRF
RQHMENEMAHYACDCWDAESKTSYGWIEIVGCADRSCYDLSCHARATKVPLVAEKPLKEPKTVNVVQFEPSKGAI
GKAYKKDAKLVMEYLAICDECYITEMEMLLNEKGEFTIETEGKTFQLTKDMINVKRFQKTLYVEEVVPNVIEPSF
GLGRIMYTVFEHTFHVREGDEQRTFFSFPAVVAPFKCSVLPLSQNQEFMPFVKELSEALTRHGVSHKVDDSSGSI
GRRYARTDEIGVAFGVTIDFDTVNKTPHTATLRDRDSMRQIRAEISELPSIVQDLANGNITWADVEARYPLFEGQ
ETGKKETIEE

788/2682 FIGURE **722**

GTCCATGGGGACCCTCGCCTTCGATGAATATGGGCGCCCTTTCCTCATCATCAAGGATCAGGACCGCAAGTCCCG TCTTATGGGACTTGAGGCCCTCAAGTCTCATATAATGGCAGCAAAGGCTGTAGCAAATACAATGAGAACATCACT CTTAAGCATGATGGATGTTGATCATCAGATTGCCAAGCTGATGGTGGAACTGTCCAAGTCTCAGGATGATGAAAT TGGAGATGGAACCACAGGAGTGGTTGTCCTGGCTGGTGCCTTGTTAGAAGAAGCGGAGCAATTGCTAGACCGAGG CATTCACCCAATCAGAATAGCCGATGGCTATGAGCAGGCTGCTCGCGTTGCTATTGAACACCTGGACAAGATCAG CGATAGCGTCCTTGTTGACATAAAGGACACCGAACCCCTGATTCAGACAGCAAAAACCACGCTGGGCTCCAAAGT GGTCAACAGTTGTCACCGACAGATGGCTGAGATTGCTGTGAATGCCGTCCTCACTGTAGCAGATATGGAGCGGAG AGACGTTGACTTTGAGCTTATCAAAGTAGAAGGCAAAGTGGGCGGCAGGCTGGAGGACACTAAACTGATTAAGGG CGTGATTGTGGACAAGGATTTCAGTCACCCACAGATGCCAAAAAAAGTGGAAGATGCGAAGATTGCAATTCTCAC ATGTCCATTTGAACCACCCAAACCAAAACAAAGCATAAGCTGGATGTGACCTCTGTCGAAGATTATAAAGCCCT TCAGAAATACGAAAAGGAGAAATTTGAAGAGATGATTCAACAAATTAAAGAGACTGGTGCTAACCTAGCAATTTG TCAGTGGGGCTTTGATGATGAAGCAAATCACTTACTTCTTCAGAACAACTTGCCTGCGGTTCGCTGGGTAGGAGG ACCTGAAATTGAGCTGATTGCCATCGCAACAGGAGGGCGGATCGTCCCCAGGTTCTCAGAGCTCACAGCCGAGAA GCTGGGCTTTGCTGGTCTTGTACAGGAGATCTCATTTGGGACAACTAAGGATAAAATGCTGGTCATCGAGCAGTG TAAGAACTCCAGAGCTGTAACCATTTTTATTAGAGGAGGAAATAAGATGATCATTGAGGAGGCGAAACGATCCCT ATCCTGTGCCCTGGCAGTTAGCCAAGAGGCGGATAAGTGCCCCACCTTAGAACAGTATGCCATGAGAGCGTTTGC CGACGCACTGGAGGTCATCCCCATGGCCCTCTCTGAAAACAGTGGCATGAATCCCATCCAGACTATGACCGAAGT CCGAGCCAGACAGGTGAAGGAGATGAACCCTGCTCTTGGCATCGACTGTTTGCACAAGGGGACAAATGATATGAA GCAACAGCATGTCATAGAAACCTTGATTGGCAAAAAGCAACAGATATCTCTTGCAACACAAATGGTTAGAATGAT $\tt TTTGAAGATTGATGACATTCGTAAGCCTGGAGAATCTGAAGAATGAGACATTGAGAAAACTATGTAGCAAGATC$ TGTAGATGCTATAATAAAAATAGCTGTTTGGTAACCATAGTTTCACTTGTTCAAAGCTGTGTAATCGTGGGGGTA CTATCTCAACTGCTTTTGTATTCATTGTATTAAAAGAATCTGTTTAAACAACCTTTATCTTCTCTTCGGGTTTAA

789/2682 FIGURE **723**

SMGTLAFDEYGRPFLIIKDQDRKSRLMGLEALKSHIMAAKAVANTMRTSLGPNGLDKMMVDKDGDVTVTNDGATI
LSMMDVDHQIAKLMVELSKSQDDEIGDGTTGVVVLAGALLEEAEQLLDRGIHPIRIADGYEQAARVAIEHLDKIS
DSVLVDIKDTEPLIQTAKTTLGSKVVNSCHRQMAEIAVNAVLTVADMERRDVDFELIKVEGKVGGRLEDTKLIKG
VIVDKDFSHPQMPKKVEDAKIAILTCPFEPPKPKTKHKLDVTSVEDYKALQKYEKEKFEEMIQQIKETGANLAIC
QWGFDDEANHLLLQNNLPAVRWVGGPEIELIAIATGGRIVPRFSELTAEKLGFAGLVQEISFGTTKDKMLVIEQC
KNSRAVTIFIRGGNKMIIEEAKRSLHDALCVIRNLIRDNRVVYGGGAAEISCALAVSQEADKCPTLEQYAMRAFA
DALEVIPMALSENSGMNPIQTMTEVRARQVKEMNPALGIDCLHKGTNDMKQQHVIETLIGKKQQISLATQMVRMI

790/2682 FIGURE **724**

CGTTGAAGACATTGTCGGGTGGTGGGAGAGGTATCGGCAGGGGCAGCGCTGCCGCCGGGGCCTGGGGCTGACCCG TCTGACTTCCCGTCCGTGCCGAGCCCACTCGAGCCGCAGCCATCTCTGGGGGACGAGATGATTTTTGATCCTACTA TGAGCAAGAAGAAAAAGAAGAAGAAGCCTTTTATGTTAGATGAGGAAGGGGATACCCAAACAGAGGAAACCC AGCCTTCAGAAACAAAAGAAGTGGAGCCAGAGCCAACTGAGGACAAGGATTTGGAAGCTGATGAAGAGGACACTA AGATATTTGATATTGATGAAGCTGAAGAAGGTGTAAAGGATCTTAAGATTGAAAGTGATGTTCAAGAACCAACTG AACCAGAGGATGACCTTGACATTATGCTTGGCAATAAAAAGAAGAAAAAGAAGAATGTTAAGTTCCCAGATGAGG ATGAAATACTAGAGAAAGATGAAGCTCTAGAAGATGAAGACAACAAAAAAGATGATGGTATCTCATTCAGTAATC AGACAGGCCCTGCTTGGGCAGGCTCAGAAAGAGACTACACATACGAGGAGCTGCTGAATCGAGTGTTCAACATCA TGAGGGAAAAGAATCCAGATATGGTTGCTGGGGAGAAAAGGAAATTTGTCATGAAACCTCCACAAGTCGTCCGAG TAGGAACCAAGAAAACTTCTTTTGTCAACTTTACAGATATCTGTAAACTATTACATCGTCAGCCCAAACATCTCC TTGCATTTTTGTTGGCTGAATTGGGTACAAGTGGTTCTATAGATGGTAATAACCAACTTGTAATCAAAGGAAGAT TCCAACAGAAACAGATAGAAAATGTCTTGAGAAGATATATCAAGGAATATGTCACTTGTCACACATGCCGATCAC CGGACACAATCCTGCAGAAGGACATACGACTCTATTTCCTACAGTGCGAAACTTGTCATTCTAGATGTTCTGTTG CCAGTATCAAAACCGGCTTCCAGGCTGTCACGGGCAAGCGAGCACAGCTCCGTGCCAAAGCTAAC<u>TAA</u>TTTGCTA ATCACTGATTTTGCAAAGCTTGTTGTGGAGATGTGGCTGGACAGGTTTGCCATCAGAGTGGATATACCGTTGTAT AAGCTGTTGACATACTCATTGCCTACTTTAACACCTGTCAGAGAAACGTGATATGGGGTAAGGAGGTGCTTTTTT AAAATCGTTCATAGACTTCTGTAAAATGCAAGATAAATTAAAGTTATTATAACAGTGATTCTTTCA

791/2682 FIGURE 725

MSGDEMIFDPTMSKKKKKKKKFFMLDEEGDTQTEETQPSETKEVEPEPTEDKDLEADEEDTRKKDASDDLDDLNFFNQKKKKKKKKKKKKKKKKKKFFMLDEEGDTQTEETQPSETKEVEPEPTEDKDLEADEEDTRKKDASDDLDDLNFFNQKKKKKKKKKKKKKFPDEDEILEKDEALEDEDNKKDDGISFSNQTGPAWAGSERDYTYEELLNRVFNIMREKNPDMVAGEKRKFVMKPPQVVRVGTKKTSFVNFTDICKLLHRQPKHLLAFLLAELGTSGSIDGNNQLVIKGRFQQKQIENVLRRYIKEYVTCHTCRSPDTILQKDIRLYFLQCETCHSRCSVASIKTGFQAVTGKRAQLRAKAN

792/2682 FIGURE **726**

AATTCGGGGGCCGTGGAGTTTGTGACATACGAGGTGACACCCCTCGAGTCACTTCCCTTCAACTCCAGCTGGAGC GCCTGCTTGGCTTTGGGTTCGTTCTGCAGCCTTCGCCCCGCTCCTAGCCTCAGGGCCGGACTCCAGCGCAGAGCC CAGCCCAGCGCAGCCTGCCAGCCAGCCAGCCGCCCAGCCCCAGCCCCGCACGAAACCCGGCCAGAGCTTC $\tt CTAGCAGCCCGAGCC{\color{blue}ATG}{\color{blue}AACACCGAAATGTATCAGACCCCCATGGAGGTGGCGGTCTACCAGCTGCACAATTTC}$ TCCATCTCCTTCTCTCTCTCTGGAGGGGATGTGGTTTCCGTTAAGCTGGACAACAGTGCCTCCGGAGCC AGCGTGGTGGCCATAGACAACAAGATCGAACAGGCCATGGATCTGGTGAAGAATCATCTGATGTATGCTGTGAGA GAGGAGGTGGAGATCCTGAAGGAGCAGATCCGAGAGCTGGTGGAGAAGAACTCCCAGCTAGAGCGTGAGAACACC CTGTTGAAGACCCTGGCAAGCCCAGAGCAGCTGGAGAAGTTCCAGTCCTGTCTGAGCCCTGAAGAGCCAGCTCCC ${\tt GAATCCCCACAAGTGCCCGAGGCCCCTGGTGGTTCTGCGGTG}{\underline{{\tt TAA}}}{\tt GTGGCTCTGTCCTCAGGGTGGGCAGAGCCA}$ CTAAACTTGTTTTACCTAGTTCTTTCCAGTTTGTTTTTGGCTCCCCAAGCATCATCTCACGAGGAGAACTTTACA CCTAGCACAGCTGGTGCCAAGAGATGTCCTAAGGACATGGCCACCTGGGTCCACTCCAGCGACAGACCCCTGACA AGAGCAGGTCTCTGGAGGCTGAGTTGCATGGGGCCTAGTAACACCAAGCCAGTGAGCCTCTAATGCTACTGCGCC $\tt CTGGGGGCTCCCAGGGCCTGGGCAACTTAGCTGCAACTGGCAAAGGAGAAGGGTAGTTTGAGGTGTGACACCAGT$ TTGCTCCAGAAAGTTTAAGGGGTCTGTTTCTCATCTCCATGGACATCTTCAACAGCTTCACCTGACAACGACTGT ACAGATGGGAGAGATTGAGCCAAGTCAGCCTTCTGTTGGTTAATATGGTATAATGCATGGCTTTGTGCACAGCCC AGTGTGGGATTACAGCTTTGGGATGACCGCTTACAAAGTTCTGTTTGGTTAGTATTGGCATAGTTTTTCTATATA GCCATAAATGCGTATATATACCCATAGGGCTAGATCTGTATCTTAGTGTAGCGATGTATACATATACACATCCAC CTACATGTTGAAGGGCCTAACCAGCCTTGGGAGTATTGACTGGTCCCTTACCTCTTATGGCTAAGTCTTTGACTG CAGCCTCTGAATGCGGCCACGGATGCCTTGCTGCTGCAACCCTTTCCCCAGCTGTCCACTGAAACGTGAAGTCCT GTTTTGAATGCCAAACCCACCATTCACTGGTGCTGACTACATAGAATGGGTTGAGAAGAACAAGTTTGGGCTTC ACAGTGTCATTTGAAAAAGCGTTTTTGTTTTGTTTTGAATTATTGTGGAAAACTTTCAAGTGAACAGAAGGATGG TGTCCTACTGTGGATGAGGGATGAACAAGGGGATGGCTTTGATCCAATGGAGCCTGGGAGGTGTGCCCAGAAAGC TTGTCTGTAGCGGGTTTTGTGAGAGTGAACACTTTCCACTTTTTGACACCTTATCCTGATGTATGGTTCCAGGAT TTGGATTTTGATTTTCCAAATGTAGCTTGAAATTTCAATAAACTTTGCTCTGTTTTTCTAAAAAATAAAAA

793/2682 FIGURE **727**

 ${\tt MNTEMYQTPMEVAVYQLHNFSISFFSSLLGGDVVSVKLDNSASGASVVAIDNKIEQAMDLVKNHLMYAVREEVEILKEQIRELVEKNSQLERENTLLKTLASPEQLEKFQSCLSPEEPAPESPQVPEAPGGSAV}$

794/2682 FIGURE **728**

ATCCTCCACTCCATCGTGAAGCGTGACATTCAGGAAAACGATGAAGAGCAGTGCAAGTCAAAGAGCAGCATC CTGGAACTGGGATCTCTCCTGGCAAAGACTGGACAAGCTGCAGAGCTTGGAGGACTCCTGAAGTATGTACGACCC TTCTTGAATTCCATCAGCAAGGCTAAAGCAGCTCGCCTGGTCCGATCTCTTGATCTGTTTCTTGATATGGAA CGCCAAGCTTTGGAGGCAAGACTGGTGTCTTTGTACTTTGATACCAAGAGGTACCAGGAAGCATTGCATTTGGGT TCTCAGCTGCTGCGGGAGTTGAAAAAGATGGACGACAAAGCTCTTTTGGTGGAAGTACAGCTTTTAGAAAGCAAA ACATACCATGCCCTGAGCAACCTGCCGAAAGCCCGAGCTGCCTTAACTTCTGCTCGAACCACAGCAAATGCCATC TACTGCCCCCTAAATTGCAGGCCACCTTGGACATGCAGTCGGGTATTATCCATGCAGCAGAAGAAGACATGG AAAACTGCGTACTCATACTTCTATGAGGCATTTGAGGGTTATGACTCCATCGACAGCCCCAAGGCCATCACATCT CTGAAGTACATGTTGCTGTGCAAAATCATGCTCAACACCCCAGAAGATGTCCAGGCTTTGGTGAGCGGGAAGCTT GCACTTCGGTATGCAGGGAGGCAGACAGAAGCATTAAAATGCGTGGCTCAGGCTAGCAAGAACAGATCACTGGCA GATTTTGAAAAGGCTCTGACAGATTACCGGGCAGAGCTCCGGGATGACCCAATCATCAGCACACACTTGGCCAAG TTGTATGATAACTTACTAGAACAGAATCTGATCCGAGTCATTGAGCCTTTTTCCAGAGTACAGATTGAACACATA TCTAGTCTCATCAAACTCTCCAAGGCCGACGTGGAAAGGAAATTATCACAGATGATTCTTGACAAGAAATTTCAT GGGATTTTGGACCAGGGGGAGGGTGTCCTGATTATTTTCGATGAACCCCCAGTAGATAAAACTTACGAAGCTGCT $\tt CTGGAAACAATTCAGAACATGAGCAAAGTAGTGGATTCCCTCTACAACAAAGCCAAGAAACTGACA<math>{f TAG}$

795/2682 FIGURE **729**

MAAAAVVEFQRAQSLLSTDREASIDILHSIVKRDIQENDEEAVQVKEQSILELGSLLAKTGQAAELGGLLKYVRP FLNSISKAKAARLVRSLLDLFLDMEAATGQEVELCLESIEWAKSEKRTFLRQALEARLVSLYFDTKRYQEALHLG SQLLRELKKMDDKALLVEVQLLESKTYHALSNLPKARAALTSARTTANAIYCPPKLQATLDMQSGIIHAAEEKDW KTAYSYFYEAFEGYDSIDSPKAITSLKYMLLCKIMLNTPEDVQALVSGKLALRYAGRQTEALKCVAQASKNRSLA DFEKALTDYRAELRDDPIISTHLAKLYDNLLEQNLIRVIEPFSRVQIEHISSLIKLSKADVERKLSQMILDKKFH GILDQGEGVLIIFDEPPVDKTYEAALETIQNMSKVVDSLYNKAKKLT

796/2682 FIGURE **730**

 ${\tt ACGTGTATCGCTGCCGTCAAG}$ ${\tt ATG}$ ${\tt GAGGGGCCTTTGTCCGTGTTCGGTGACCGCAGCACTGGGGAAACGATCCGC}$ TCCCAAAACGTTATGGCTGCAGCTTCGATTGCCAATATTGTAAAAAGTTCTCTTGGTCCAGTTGGCTTGGATAAA ATGTTGGTGGATGTATTGGTGATGTAACCATTACTAACGATGGTGCAACCATCCTGAAGTTACTGGAGGTAGAA CATCCTGCAGCTAAAGTTCTTTGTGAGCTGGCTGATCTGCAAGACAAAGAAGTTGGAGATGGAACTACTTCAGTG GTTATTATTGCAGCAGAACTCCTAAAAAATGCAGATGAATTAGTCAAACAGAAAATTCATCCCACATCAGTTATT AGTGGCTATCGACTTGCTTGCAAGGAAGCAGTGCGTTATATCAATGAAAACCTAATTGTTAACACAGATGAACTG GGAAGAGATTGCCTGATTAATGCTGCTAAGACATCCATGTCTTCCAAAATCATTGGGATAAATGGTGATTTCTTT TCTGTTAATATTTTGAAAGCCCATGGGAGAAGTCAAATGGAGAGTATGCTCATCAGTGGCTATGCACTCAACTGT ACAAAAATGAAGCTTGGTGTACAGGTGGTCATTACAGACCCTGAAAAACTGGACCAAATTAGACAGAGAGAATCA GATATCACCAAGGAGAATTCAGAAGATCCTGGCAACTGGTGCCAATGTTATTCTAACCACTGGTGGAATTGAT GATATGTGTCTGAAGTATTTTGTGGAGGCTGGTGCTATGGCAGTTAGAAGAGTTTTAAAAAAGGGACCTTAAACGC ATTGCCAAAGCTTCTGGAGCAACTATTCTGTCAACCCTGGCCAATTTGGAAGGTGAAGAAACTTTTGAAGCTGCA ATGTTGGGACAGGCAGAAGAAGTGGTACAGGAGAGAATTTGTGATGATGAGCTGATCTTAATCAAAAATACTAAG GCTCGTACGTCTGCATCGATTATCTTACGTGGGGCAAATGATTTCATGTGTGATGAGATGGAGCGCTCTTTACAT GATGCACTTTGTGTAGTGAAGAGAGTTTTGGAGTCAAAATCTGTGGTTCCCGGTGGGGGTGCTGTAGAAGCAGCC CTTTCCATATACCTTGAAAACTATGCAACCAGCATGGGGTCTCGGGAACAGCTTGCGATTGCAGAGTTTGCAAGA TCACTTCTTGTTATTCCCAATACACTAGCAGTTAATGCTGCCCAGGACTCCACAGATCTGGTTGCAAAATTAAGA GCTTTCATAATGAGGCCCAGGTTAACCCAGAACGTAAAAATCTAAAATGGATTGGTCTTGATTTGAGCAATGGT GAAGCTGCAATCACCATTCTTCGAATTGATGATCTTATTAAATTACATCCAGAAATCCTTCGGATTAAACATGGA AGTTATGAAGATGCTGTTCACTCTGGAGCCCTTAATGAT<u>TGA</u>TCTGATGTTCCTTTTATTTATAACAATGTTAAA TGCAATGTCTTGTACCTTGAGTTGAGTATTACACATTAAAGTAAAGTACAAGCTGTAAACTTGGGTTTTTGTGAT GTAGGAAATGGTTTCCATCTGTACTTTGGTCCTCTGATTTCAGATATTGCAACCTAGTACTTTATTAGTTTAAAA AGAAATTGAGGTTGTTCAAAGTTTAAGCAATTCATTCTCTCTGAACACACATTGCTATTCCCATCCCACCCCCAA

797/2682 FIGURE **731**

MEGPLSVFGDRSTGETIRSQNVMAAASIANIVKSSLGPVGLDKMLVDDIGDVTITNDGATILKLLEVEHPAAKVL CELADLQDKEVGDGTTSVVIIAAELLKNADELVKQKIHPTSVISGYRLACKEAVRYINENLIVNTDELGRDCLIN AAKTSMSSKIIGINGDFFANMVVDAVLAIKYTDIRGQPRYPVNSVNILKAHGRSQMESMLISGYALNCVVGSQGM PKRIVNAKIACLDFSLQKTKMKLGVQVVITDPEKLDQIRQRESDITKERIQKILATGANVILTTGGIDDMCLKYF VEAGAMAVRRVLKRDLKRIAKASGATILSTLANLEGEETFEAAMLGQAEEVVQERICDDELILIKNTKARTSASI ILRGANDFMCDEMERSLHDALCVVKRVLESKSVVPGGGAVEAALSIYLENYATSMGSREQLAIAEFARSLLVIPN TLAVNAAQDSTDLVAKLRAFHNEAQVNPERKNLKWIGLDLSNGKPRDNKQAGVFEPTIVKVKSLKFATEAAITIL RIDDLIKLHPEILRIKHGSYEDAVHSGALND

798/2682 FIGURE **732**

GCTTTCTTTCCGTCGCAGAGAGCATCGGCCGGCGACCGTTCCGGCGGCCATTGCGAAAACTTCCCCACGGCTACT GCGTCCACGTGGCGTGGCGTGGGGACTCCCTGAAAGCAGAGCGGCAGGGCGCCCGGAAGTCGTGAGTCT GCCTGGGTGCTGCCCTGGGCCCGGGGAACAGAACACACATCTGGCTTTTTGTTAGAGGTCTTCATGGAAAGAGTG CCCAATTAGCAAGTAAACTGTGTCCTCTGAAAGATGAACCATGGCCTATACATCCTTGGGAACCAGGTTCCTTTA GAGTTGGTCTTATTGCCTTGAAGCTGGGCATGATGCCTTTATGGACCAAGGATGGTCAAAAGCATGTGGTCACAT TACTTCAGGTACAAGACTGTCATGTCTTAAAATATACGTCAAAGGAAAACTGTAATGGAAAAATGGCAACCCTGT CTGTAGGAGGAAAAACTGTATCACGTTTTCGTAAAGCTACATCCATATTGGAATTTTACCGGGAACTTGGATTGC CGCCGAAACAGACAGTTAAAATCTTTAATATAACAGATAATGCTGCAATTAAACCAGGCACTCCTCTTTATGCTG CTCACTTTCGTCCAGGACAGTATGTGGATGTCACAGCCAAAACTATTGGTAAAGGTTTTCAAGGTGTCATGAAAA GATGGGGATTTAAAGGCCAGCCTGCTACGCATGGTCAAACGAAAACCCACAGGAGACCTGGAGCTGTTGCAACTG GTGATATTGGCAGAGTCTGGCCTGGAACTAAAATGCCTGGAAAAATGGGAAACATATACAGGACAGAATATGGAC TGAAAGTGTGGAGAATAAACACAAAGCACAACATAATCTATGTAAATGGCTCTGTACCTGGACATAAAAATTGCT TAGTAAAGGTCAAAGATTCTAAACTGCCTGCATATAAGGATCTCGGTAAAAATCTACCATTCCCTACATATTTTC CTGATGGAGATGAAGAGCTGCCAGAAGATTTGTATGATGAAAACGTGTGTCAGCCCGGTGCGCCTTCTATTA $\texttt{CATTTGCC} \underline{\textbf{TAA}} \texttt{CATCTTTGGACGTGGCAGAACCTTACATATTCTGTGAGCTTCGATGAGCCAGAGTGATATCATA}$ ACCACCAGAAATCATACTCTCCTTTCTTAGTCACAACAAAATCACACATGTCATCTTTGTCAAGGGCATAAATAT ATCATTCATACCCCCATTAAATTTTGTTAGAAAAATTACCACATTAAATATATGAGTTAAGTAGATTTGC TGAAATTGGTGTTGGGCATATTAGCAAAATATTCTTAATTTGTGGACTCGATTCTTTTTTACTACATATTTCCCA AGTTATCTTAAGATGTCTGTAAATTTAACTTTTATTAAAGTTTTTGTCAATCTTTGTGAAATAGTGGTTGTGGAAC AGTAGAAAACCATATGGGGACTATAGTGCAACCTATTTGGGTAAAGAAACCATTTGCTAAAATGGAGAAAGTAAA TAGATTTTTATTTAAATTACAGAAACATGTTAAAGGCCGGACAAAGGAAAGACAATAAAATCATAAATTATCGGT CCTGTTTAAAAAAAAAAAAAAAAAAAA

799/2682 FIGURE 733

MPGWRLLTQVGAQVLGRLGDGLGAALGPGNRTHIWLFVRGLHGKSGTWWDEHLSEENVPFIKQLVSDEDKAQLAS KLCPLKDEPWPIHPWEPGSFRVGLIALKLGMMPLWTKDGQKHVVTLLQVQDCHVLKYTSKENCNGKMATLSVGGK TVSRFRKATSILEFYRELGLPPKQTVKIFNITDNAAIKPGTPLYAAHFRPGQYVDVTAKTIGKGFQGVMKRWGFK GQPATHGQTKTHRRPGAVATGDIGRVWPGTKMPGKMGNIYRTEYGLKVWRINTKHNIIYVNGSVPGHKNCLVKVK DSKLPAYKDLGKNLPFPTYFPDGDEEELPEDLYDENVCQPGAPSITFA

800/2682 FIGURE 734A

GGCGGAACTCCTCGGCCAGGTCCTTCCCCGGGCCCTTGCCCTGGAGCCATGCTGGGCCCTAGCCCGGGT CCCTCGCCGGGCTCCGCCCACAGCATGATGGGGCCCAGCCCAGGGCCGCCCTCAGCAGGACACCCCATCCCCACC ATGTCGGACGACCGCGCTACAACCAGATGAAAGGAATGGGGATGCGGTCAGGGGGCCATGCTGGGATGGGGCCC CCGCCCAGCCCCATGGACCAGCACTCCCAAGGTTACCCCTCGCCCCTGGGTGGCTCTGAGCATGCCTCTAGTCCA GTTCCAGCCAGTGGCCCGTCTTCGGGGCCCCAGATGTCTTCCGGGCCAGGAGGTGCCCCGCTGGATGGTGCTGAC ATCATGGCCTACAAGATGCTGGCCAGGGGGCAGCCCCTCCCCGACCACCTGCAGATGGCGGTGCAGGGCAAGCGG CCGATGCCCGGGATGCAGCAGCAGATGCCAACGCTACCTCCACCCTCGGTGTCCGCAACAGGACCCGGCCCTGGC CCTGGCCCTGGCCCGGCCCGGGCCCGGCACCTCCAAATTACAGCAGGCCTCATGGTATGGGAGGGCCC AACATGCCTCCCCAGGACCCTCGGGCGTGCCCCCGGGATGCCAGGCCAGCCTCCTGGAGGGCCTCCCAAGCCC TGGCCTGAAGGACCCATGGCGAATGCTGCTGCCCCCACGAGCACCCCTCAGAAGCTGATTCCCCCGCAGCCAACG GGCCGCCCTTCCCCGCGCCCCCTGCCGTCCCACCCGCCGCCTCGCCCGTGATGCCACCGCAGACCCAGTCCCCC GGGCAGCCGGCCCAGCCCGCGCCCATGGTGCCACTGCACCAGAAGCAGAGCCGCATCACCCCCATCCAGAAGCCG CGGGGCCTCGACCCTGTGGAGATCCTGCAGGAGCGCGAGTACAGGCTGCAGGCTCGCATCGCACACCGAATTCAG GAACTTGAAAACCTTCCCGGGTCCCTGGCCGGGGATTTGCGAACCAAAGCGACCATTGAGCTCAAGGCCCTCAGG CTGCTGAACTTCCAGAGGCAGCTGCGCCAGGAGGTGGTGGTGCTGCAGGGGGACACAGCGCTGGAGACAGCC CTCAATGCTAAGGCCTACAAGCGCAGCAAGCGCCAGTCCCTGCGCGAGGCCCGCATCACTGAGAAGCTGGAGAAG CAGCAGAAGATCGAGCAGGAGCGCAAGCGCCGGCAGAAGCACCAGGAATACCTCAATAGCATTCTCCAGCATGCC AAGGATTTCAAGGAATATCACAGATCCGTCACAGGCAAAATCCAGAAGCTGACCAAGGCAGTGGCCACGTACCAT GCCAACACGGAGCGGAGCAGAAGAAGAAGAACGAGCGGATCGAGAAGGAGCGCATGCGGAGGCTCATGGCTGAA GAGTACGTGGCTAACCTCACGGAGCTGGTGCGGCAGCAAGGCTGCCCAGGTCGCCAAGGAGAAAAAAGAAGAAA AAGAAAAAGAAGAAGGCAGAAAATGCAGAAGGACAGACGCCTGCCATTGGGCCGGATGGCGAGCCTCTGGACGAG ACCAGCCAGATGAGCGACCTCCCGGTGAAGGTGATCCACGTGGAGAGTGGGAAGATCCTCACAGGCACAGATGCC CCCAAAGCCGGGCAGCTGGAGGCCTGGCTCGAGATGAACCCGGGGTATGAAGTAGCTCCGAGGTCTGATAGTGAA GAAAGTGGCTCAGAAGAAGAGGAGGAGGAGGAGGAGGAGGAGCCGCAGGCACAGCCTCCCACCCTGCCC GTGGAGGAGAAGAAGATCCAGATCCAGACAGCGATGACGTCTCTGAGGTGGACGCGCGCACATCATTGAG AATGCCAAGCAAGATGTCGATGATAATATGGCGTGTCCCAGGCCCTTGCACGTGGCCTGCAGTCCTACTATGCC GTGGCCCATGCTGTCACTGAGAGAGTGGACAAGCAGTCAGCGCTTATGGTCAATGGTGTCCTCAAACAGTACCAG ATCAAAGGTTTGGAGTGGCTGGTGTCCCTGTACAACAACAACCTGAACGGCATCCTGGCCGACGAGATGGGCCTG GGGAAGACCATCCAGACCATCGCGCTCATCACGTACCTCATGGAGCACAAACGCATCAATGGGCCCTTCCTCATC ATCGTGCCTCTCTCAACGCTGTCCAACTGGGCGTACGAGTTTGACAAGTGGGCCCCCTCCGTGGTGAAGGTGTCT TACAAGGGATCCCCAGCAGCAGACGGGCCTTTGTCCCCCAGCTCCGGAGTGGGAAGTTCAACGTCTTGCTGACG ACGTACGAGTACATCATCAAAGACAAGCACATCCTCGCCAAGATCCGTTGGAAGTACATGATTGTGGACGAAGGT CACCGCATGAAGAACCACCACTGCAAGCTGACGCAGGTGCTCAACACGCACTATGTGGCACCCCGCCGCCTGCTG $\tt CTGACGGGCACACCGCTGCAGAACAAGCTTCCCGAGCTCTGGGCGCTGCTCAACTTCCTGCTGCCCACCATCTTC$ AAGAGCTGCAGCACCTTCGAGCAGTGGTTTAACGCACCCTTTGCCATGACCGGGGAAAAGGTGGACCTGAATGAG ${\tt GAGGAAACCATTCTCATCATCCGGCGTCTCCACAAAGTGCTGCGGCCCTTCTTGCTCCGACGACTCAAGAAGGAA}.$ GTCGAGGCCCAGTTGCCCGAAAAGGTGGAGTACGTCATCAAGTGCGACATGTCTGCGCTGCAGCGAGTGCTCTAC CGCCACATGCAGGCCAAGGGCGTGCTGCTGACTGATGGCTCCGAGAAGGACAAGAAGGGCAAAAGGCGGCACCAAG ACCCTGATGAACACCATCATGCAGCTGCGGAAGATCTGCAACCACCCCTACATGTTCCAGCACATCGAGGAGTCC TTTTCCGAGCACTTGGGGGTTCACTGGCGGCATTGTCCAAGGGCTGGACCTGTACCGAGCCTCGGGTAAATTTGAG

801/2682 FIGURE 734B

ATGACCATCATGGAAGATTACTTTGCGTATCGCGGCTTTAAATACCTCAGGCTTGATGGAACCACGAAGGCGGAG GACCGGGGCATGCTGCAAAAACCTTCAACGAGCCCGGCTCTGAGTACTTCATCTTCCTGCTCAGCACCCGGGCT GGGGGGCTCGGCCTGAACCTCCAGTCGGCAGACACTGTGATCATTTTTGACAGCGACTGGAATCCTCACCAGGAC CTGCAAGCGCAGGACCGAGCCCACCGCATCGGGCAGCAGAACGAGGTGCGTGTGCTCCGCCTCTGCACCGTCAAC AGCGTGGAGGAGAAGATCCTAGCTGCAGCCAAGTACAAGCTCAACGTGGACCAGAAGGTGATCCAGGCCGGCATG TTCGACCAGAAGTCCTCCAGCCATGAGCGGCGCGCCTTCCTGCAGGCCATCCTGGAGCACGAGGAGCAGGATGAG AGCAGACACTGCAGCACGGGCAGCGGCAGTGCCAGCTTCGCCCACACTGCCCCTCCGCCAGCGGGCGTCAACCCC GACTTGGAGGAGCCACCTCTAAAGGAGGAAGACGAGGTGCCCGACGACGACCGTCAACCAGATGATCGCCCGG CACGAGGAGGAGTTTGATCTGTTCATGCGCATGGACCTGGACCGCAGGCGCGAGGAGGCCCGCAACCCCAAGCGG AAGCCGCCCTCATGGAGGAGGACGAGCTCCCCTCGTGGATCATCAAGGACGACGCGGAGGTGGAGCGGCTGACC TGTGAGGAGGAGGAGGAGAAGATGTTCGGCCGTGGCTCCCGCCACCGCAAGGAGGTGGACTACAGCGACTCACTG ACGGAGAAGCAGTGGCTCAAGGCCATCGAGGAGGGCACGCTGGAGGAGATCGAAGAGAGGTCCGGCAGAAGAAA ACCAAGAAGATGAAGAAGATTGTGGATGCCGTGATCAAGTACAAGGACAGCAGCAGTGGACGTCAGCTCAGCGAG GTCTTCATCCAGCTGCCCTCGCGAAAGGAGCTGCCCGAGTACTACGAGCTCATCCGCAAGCCCGTGGACTTCAAG AAGATAAAGGAGCGCATTCGCAACCACAAGTACCGCAGCCTCAACGACCTAGAGAAGGACGTCATGCTCCTGTGC CAGAACGCACAGACCTTCAACCTGGAGGGCTCCCTGATCTATGAAGACTCCATCGTCTTGCAGTCGGTCTTCACC ${\tt GAACAAGAGGAGCCCTCAGGAAGTGGCAGCGAAGAAGAC} {\color{red}{\textbf{TGA}}} {\color{red}{\textbf{GCCCCGACATTCCAGTCTCGACCCCGAGCC}}$ CCTCGTTCCAGAGCTGAGATGGCATAGGCCTTAGCAGTAACGGGTAGCAGATGTAGTTTCAGACTTGGAGTA AAACTGTATAAACAAAAGAATCTTCCATATTTATACAGCAGAGAAGCTGTAGGACTGTTTGTGACTGGCCCTGTC CGATACCTGTTTTCCTTTCCGTTGCTGGCAGTACTGTTGCGCCGCAGTTTGGAGTCACTGTAGTTAAGTGTGGA TGCATGTGCGTCACCGTCCACTCCTACTGTATTTTATTGGACAGGTCAGACTCGCCGGGGGCCCGGCGAGGG TATGTCAGTGTCACTGGATGTCAAACAGTAATAAATTAAACCAACAACAAAACGCA

802/2682 FIGURE 735

 ${ t MSTPDPPLGGTPRPGPSPGPSPGAMLGPSPGPSPGSAHSMMGPSPGPPSAGHPIPTQGPGGYPQDNMHQMHKP}$ ${\tt MESMHEKGMSDDPRYNQMKGMGMRSGGHAGMGPPPSPMDQHSQGYPSPLGGSEHASSPVPASGPSSGPQMSSGPG}$ GAPLDGADPQALGQQNRGPTPFNQNQLHQLRAQIMAYKMLARGQPLPDHLQMAVQGKRPMPGMQQQMPTLPPPSV SATGPGPGPGPGPGPGPAPPNYSRPHGMGGPNMPPPGPSGVPPGMPGQPPGGPPKPWPEGPMANAAAPTSTPQ KLIPPQPTGRPSPAPPAVPPAASPVMPPQTQSPGQPAQPAPMVPLHQKQSRITPIQKPRGLDPVEILQEREYRLQ ARIAHRIQELENLPGSLAGDLRTKATIELKALRLLNFQRQLRQEVVVCMRRDTALETALNAKAYKRSKRQSLREA RITEKLEKQQKIEQERKRRQKHQEYLNSILQHAKDFKEYHRSVTGKIQKLTKAVATYHANTEREQKKENERIEKE RMRRLMAEDEEGYRKLIDQKKDKRLAYLLQQTDEYVANLTELVRQHKAAQVAKEKKKKKKKKKKAENAEGQTPAIG PDGEPLDETSQMSDLPVKVIHVESGKILTGTDAPKAGQLEAWLEMNPGYEVAPRSDSEESGSEEEEEEEEEQPQ AAQPPTLPVEEKKKIPDPDSDDVSEVDARHIIENAKQDVDDEYGVSQALARGLQSYYAVAHAVTERVDKQSALMV NGVLKQYQIKGLEWLVSLYNNNLNGILADEMGLGKTIQTIALITYLMEHKRINGPFLIIVPLSTLSNWAYEFDKW APSVVKVSYKGSPAARRAFVPQLRSGKFNVLLTTYEYIIKDKHILAKIRWKYMIVDEGHRMKNHHCKLTQVLNTH YVAPRRLLLTGTPLQNKLPELWALLNFLLPTIFKSCSTFEQWFNAPFAMTGEKVDLNEEETILIIRRLHKVLRPF LLRRLKKEVEAQLPEKVEYVIKCDMSALQRVLYRHMQAKGVLLTDGSEKDKKGKGGTKTLMNTIMQLRKICNHPY ${\tt MFQHIEESFSEHLGFTGGIVQGLDLYRASGKFELLDRILPKLRATNHKVLLFCQMTSLMTIMEDYFAYRGFKYLR}$ LDGTTKAEDRGMLLKTFNEPGSEYFIFLLSTRAGGLGLNLQSADTVIIFDSDWNPHQDLQAQDRAHRIGQQNEVR VLRLCTVNSVEEKILAAAKYKLNVDQKVIQAGMFDQKSSSHERRAFLQAILEHEEQDESRHCSTGSGSASFAHTA PPPAGVNPDLEEPPLKEEDEVPDDETVNQMIARHEEEFDLFMRMDLDRRREEARNPKRKPRLMEEDELPSWIIKD DAEVERLTCEEEEEKMFGRGSRHRKEVDYSDSLTEKQWLKAIEEGTLEEIEEEVRQKKSSRKRKRDSDAGSSTPT TSTRSRDKDDESKKQKKRGRPPAEKLSPNPPNLTKKMKKIVDAVIKYKDSSSGRQLSEVFIQLPSRKELPEYYEL IRKPVDFKKIKERIRNHKYRSLNDLEKDVMLLCQNAQTFNLEGSLIYEDSIVLQSVFTSVRQKIEKEDDSEGEES EEEEEGEEEGSESESRSVKVKIKLGRKEKAQDRLKGGRRRPSRGSRAKPVVSDDDSEEEQEEDRSGSGSEED

803/2682 FIGURE 736

ATGCCCTACCAGCGTGTTGGAGAGACCGCTACCGGTGAACCAGCGGGGTTTTTCGGACTTGGGGGTCGTCA
GATCTGCTGGATCTAGGTCCAGGGAGTCTCAGTGATGGTCTGAGCCTGGCCGCCAGGCTGGGGTGTCCCAGAA
GAGCCAGGAATCGAAATGCTTCATGGAACAACCACCCTGGCCTTCAAGTTCCGCCATGGAGTCATAGTTGCAGCT
GACTCCAGGGCTACAGCGGGTGCTTACATTGCCTCCCAGACGGTGAAGAAGGTGATAGAGATCAACCCATACCTG
CTAGGCACCATGGCTGGGGGCCCAGCGGATTGCAGCTTCTGGGAACGGCTGTTGGCTCGGCAATGTCGAATCTAT
GAGCTTCGAAATAAGGAACGCATCTCTGTAGCAGCTGCCTCCAAACTGCTTGCCAACATGGTGTATCAGTACAAA
GGCATGGGGCTGTCCATGGGCACCATGATCTGTGGCTGGGATAAGAGAGGCCCTGGCCTCTACTACGTGGACAGT
GAAGGGAACCGGATTTCAGGGGCCACCTTCTCTGTAGGTTCTGGCTCTGTGTATGCATATGGGGTCATGGATCGG
GGCTATTCCTATGACCTGGAAGTGGAGCAGGCCTATGATCTGGCCCGTCGAGCCATCTACCAAGCCACCTACAGA
GATGCCTACTCAGGAGGTGCAGTCAACCTCTACCACGTGCGGAGGATGGCTGGATCCGAGTCTCCAGTGACAAT
GTGGCTGATCTACATGAGAAGTATAGTGGCTCTACCCCCTCAC

804/2682 FIGURE 737

MALASVLERPLPVNQRGFFGLGGRADLLDLGPGSLSDGLSLAAPGWGVPEEPGIEMLHGTTTLAFKFRHGVIVAA DSRATAGAYIASQTVKKVIEINPYLLGTMAGGAADCSFWERLLARQCRIYELRNKERISVAAASKLLANMVYQYK GMGLSMGTMICGWDKRGPGLYYVDSEGNRISGATFSVGSGSVYAYGVMDRGYSYDLEVEQAYDLARRAIYQATYR DAYSGGAVNLYHVREDGWIRVSSDNVADLHEKYSGSTP

805/2682 FIGURE 738A

TGCTAAGTAACTTGTTTATTGTCAGACATCTAGTGAGTCGCAGAGCCAGGGAACTGACCACGGGCATTTTCACCC CATTACCCTTCCAGCTTATTGCCGACTGCTCCCGAAGGGACGCGAAAAGGACAGGCAAAGGGTTTCACCAAACCCT TTGTAATGGGAGATTCTTGCCTTCTTACCTTTCCTCACGTTTGCTTCTCTGCCAGAATGTCTTCCCGCACTTTCC CCAGAACCCAAGTTCTCCTAATCATCTTTCAAGATCCCTTTCCCTCAACCACAGATGAGCCGTGCCTATTTCTCC AAATGATCGTCCGGCCCCGCACCGTGGGACCAGGACGCTGCCTCGACCATGGCGGTCTCCTGGAAACAGGCTGCT TTGAGCCGAAACTGGTGACCGTTTCCCAACCCCGTCCAGGAGTCCGACGCCTCTTTTCTCCAGGCCAACTTCAAG TGAGGTGTATCAACTCTATCCGCACAAATTTCTTGCCACGAGAGCAGAAGATTATGATCTCTGATGCTGCCTTAG GGCTGAAGACACTCCCAACTCGGCGACGCTTAGCAATCATCGACTTCCTCCTCCTCTTTGGCTGCCTCGGAGATCC CAGTACCTGCGCTGTGGAGTGAAGTGAACCGGTATGGCCAGAACGGCGACTTCACGCGCGCTCTCAAGACCGTCA ATAAGATACTACAGATCAACAAAGATGACGTAACTGCCCTGCATTGTAAAGTGGTATGCCTTATCCAGAATGGAA AACTGAAGGAGCTTTATGGACAAGTGTTATACCGTTTGGAACGCTATGATGAATGCTTAGCAGTGTATAGAGATC ATTGGGAAAAAGTGGTTCCAGAGAACCTGGGCCTCCAAGAAGGCACACATGAGCTGTGCTACAACACTGCATGTG CACTGATAGGCCAAGGCCAGCTGAACCAGGCCATGAAAATCCTACAAAAAGCTGAAGATCTTTGCCGCCGTTCAT TTCTGCAGCTTCAGGGTCGAACAGAGGAGGCTTTGCAACTTTACAATCAAATAAAAACTAAAACCAACAGATG TGGGATTACTAGCTGTAATTGCAAATAACATCATTACCATTAACAAGGACCAAAATGTCTTTGACTCCAAGAAGA AAGTGAAATTAACCAATGCGGAAGGAGTAGAGTTTAAGCTTTCCAAGAAACAACTACAAGCTATAGAATTTAACA AAGCTTTACTTGCTATGTACACAAACCAGGCTGAACAATGCCGCAAAATATCTGCCAGTTTACAGTCCCAAAGTC CCGAGCATCTCTTACCTGTGTTAATCCAAGCTGCCCAGCTCTGCCGTGAAAAGCAGCACACAAAAGCAATAGAGC TGCTTCAGGAATTTTCAGATCAGCATCCAGAAAATGCAGCTGAAATTAAGCTGACCATGGCACAGTTGAAAATTT CTCAAGGTAATATTTCTAAAGCATGTCTAATATTGAGAAGCATAGAGGAGTTAAAGCATAAACCAGGCATGGTAT $\tt CTGCATTAGTTACCATGTATAGCCATGAAGAAGATATTGATAGTGCCATTGAGGTCTTCACACAAGCTATCCAGT$ GGTATCAAAACCATCAGCCAAAATCTCCTGCTCATTTGTCCTTGATAAGAGAAGCTGCAAACTTCAAACTCAAAT ATGGGCGGAAGAAGGAGGCAATTAGTGACCTACAACAGCTGTGGAAACAAAATCCAAAAAGATATTCACACCCTGG CACAGCTTATTTCTGCTTACTCACTTGTAGATCCAGAGAAAGCCCAAAGCTCTTAGTAAACACTTGCCATCGTCAG GAAAATTGCCTAAGAATTATGACCCAAAAGTTACCCCAGATCCAGAAAGATGGCTGCCAATGCGAGAACGTTCTT ACTACCGGGGAAGAAGAAGGGTAAAAAGAAGGATCAGATTGGAAAAGGGACCCAGGGAGCAACTGCAGGAGCTT CATCTGAACTGGATGCCAGTAAAACTGTGAGCAGCCCACCCCCCAAGACCTGGCAGTGCTGCAACAGTAT CTGCCTCTACAAGTAACATCATACCCCCAAGACACCAGAAACCTGCAGGGGCTCCAGCAACAAAAAAAGAAACAGC AACAGAAAAAGAAGAAAGGTGGAAAAGGTGGCTGG<u>TGA</u>TGAGAATATTCTTGTTGCAGGCTGTTTTTAAACTAGT GTCAGTGACACTAGGAATATAAAAGGTAACACAGCAAGAAGCACAGAACTACTCCCTCTTCATCTCCATATTT TCATAATTTCTTGTGTTTCAAATAGGGAAACATCTTCCTCAAAGTCTGCCTAGTGAGATATGGCCTACTGGTTGC CTCATAGCTTTGTACAGATTATGAGGACTGAAAATAATTGGGCATTTACCCATCTTGGTATCTGTTGTATCCTTT ATCTGTGTGTGCTGATTTGATCTTTTTCAGTTTCACATACCTTATCTAAGGTTTCCCAGGATTTAAACAGAAAC TACTTCTATGATTTCAGCTGGAGTCTGAAGATACTTGTTTCTGTTCAAGTCCCACTTTAAATTATGTCTTAGGAG **ACTGAAAGTGGAATCTTCTGAGCATTCCTAAATATCTGCTTAGAAATATCATGTGATAAAGAGGGACCTTCTTAA** TACACTGATGTTCTTCACTAAATGGATGGCCACAAGAAAAATAAAGTAAATGTCTTAAATAATTTAACCATAAAT TATATATATATATAAACNTGAAATATATATATATGGCTCCTTTGTGCCCCATGTCATTTTCAGATTATGGTAG CATGCTGATACAGCACCATGAAAGAACTCAAGGAAAATATATCAATGTAAGAAGTTCACTCTTAGACCCAGTGTT CTGAGGTCACATGGGTTTGGACTGTCTCAATCAGAAAGATTAATGACTGTTATCAAGAACATGAACATTGGCTTC

806/2682 FIGURE 738B

807/2682 FIGURE **739**

MIVRPRTVGPGRCLDHGGLLETGCFEPKLVTVSQPRPGVRRLFSPGQLQVRCINSIRTNFLPREQKIMISDAALG
LKTLPTRRRLAIIDFLLLLAASEILFRGRGLPAPPLVSSKMASGGSGGVSVPALWSEVNRYGQNGDFTRALKTVN
KILQINKDDVTALHCKVVCLIQNGSFKEALNVINTHTKVLANNSLSFEKAYCEYRLNRIENALKTIESANQQTDK
LKELYGQVLYRLERYDECLAVYRDLVRNSQDDYDEERKTNLSAVVAAQSNWEKVVPENLGLQEGTHELCYNTACA
LIGQGQLNQAMKILQKAEDLCRRSLSEDTDGTEEDPQAELAIIHGQMAYILQLQGRTEEALQLYNQIIKLKPTDV
GLLAVIANNIITINKDQNVFDSKKKVKLTNAEGVEFKLSKKQLQAIEFNKALLAMYTNQAEQCRKISASLQSQSP
EHLLPVLIQAAQLCREKQHTKAIELLQEFSDQHPENAAEIKLTMAQLKISQGNISKACLILRSIEELKHKPGMVS
ALVTMYSHEEDIDSAIEVFTQAIQWYQNHQPKSPAHLSLIREAANFKLKYGRKKEAISDLQQLWKQNPKDIHTLA
QLISAYSLVDPEKAKALSKHLPSSDSMSLKVDVEALENSAGATYIRKKGGKVTGDSQPKEQGQGDLKKKKKKKKK
KLPKNYDPKVTPDPERWLPMRERSYYRGRKKGKKKDQIGKGTQGATAGASSELDASKTVSSPPTSPRPGSAATVS
ASTSNIIPPRHQKPAGAPATKKKQQQKKKKGGKGGW

808/2682 FIGURE 740

809/2682 FIGURE 741

MSRGSSAGFDRHITIFSPEGRLYQVEYAFKAINQGGLTSVAVRGKDCAVIVTQKKVPDKLLDSSTVTHLFKITEN IGCVMTGMTADSRSQVQRARYEAANWKYKYGYEIPVDMLCKRIADISQVYTQNAEMRPLGCCMILIGIDEEQGPQ VYKCDPAGYYCGFKATAAGVKQTESTSFLEKKVKKKFDWTFEQTVETAITCLSTVLSIDFKPSEIEVGVVTVENP KFRILTEAEIDAHLVALAERD

810/2682 FIGURE 742

 ${\tt TCTCTTGATTCCTAGTCTCTGAT} \underline{{\tt ATC}} {\tt GCACCTCCGTCAGTCTTTGCCGAGGTTCCGCAGGCCCAGCCTGTCCTG}$ GTCTTCAAGCTCACTGCCGACTTCAGGGAGGATCCGGACCCCCGCAAGGTCAACCTGGGAGTGGGAGCATATCGC ACGGATGACTGCCATCCCTGGGTTTTGCCAGTAGTGAAGAAGTGGAGCAGAAGATTGCTAATGACAATAGCCTA AATCACGAGTATCTGCCAATCCTGGGCCTGGCTGAGTTCCGGAGCTGTGCTTCTCGTCTTGCCCTTGGGGATGAC AGCCCAGCACTCAAGGAGAAGCGGGTAGGAGGTGTGCAATCTTTGGGGGGGAACAGGTGCACTTCGAATTGGAGCT GATTTCTTAGCGCGTTGGTACAATGGAACAACAACAACAACACCTGTCTATGTGTCCTCACCAACCTGGGAG AATCACAATGCTGTGTTTTCCGCTGCTTGTTTTAAAGACATTCGGTCCTATCGCTACTGGGATGCAGAAAGAGA GGATTGGACCTCCAGGGCTTCCTGAATGATCTGGAGAATGCTCCTGAGTTCTCCATTGTTGTCCTCCACGCCTGT GCACACAACCCAACTGGGATTGACCCAACTCCGGAGCAGTGGAAGCAGATTGCTTCTGTCATGAAGCACCGGTTT TATTTTGTGTCTGAAGGCTTCGAGTTCTTCTGTGCCCAGTCCTTCTCCAAGAACTTCGGGCTCTACAATGAGAGA GTCGGGAATCTGACTGTGGTTGGAAAAGAACCTGAGAGCATCCTGCAAGTCCTTTCCCAGATGGAGAAGATCGTG CGGATTACTTGGTCCAATCCCCCCGCCCAGGGAGCACGAATTGTGGCCAGCACCCTCTCTAACCCTGAGCTCTTT GAGGAATGGACAGGTAATGTGAAGACAATGGCTGACCGGATTCTGACCATGAGATCTGAACTCAGGGCACGACTA GAAGCCCTCAAAACCCCTGGGACCTGGAACCACATCACTGATCAAATTGGCATGTTCAGCTTCACTGGGTTGAAC CCCAAGCAGGTTGAGTATCTGGTCAATGAAAAGCACATCTACCTGCTGCCAAGTGGTCGAATCAACGTGAGTGGC GGATTAGAGACACTTGCAGGACTGAAAGCTGCTCTGGTGAGGCAGCCTCTGTTTAAACCGGCCCCACATGAAGAG GAATAAAAGAGTACTTTGATCATGAGACATAGGTATCTTGTCCCTCTCACTAAAAAGGAGTGTTGTGTGGGCGG CCACGTGCTTCTATGTGGTGTTTGACTCTGTACAAATTCTAGTCCCAAAGATCAAGTTGTCTGAAGGAGCCAAAG TGTGAATGTGGGTGTCGGCTGCGGCATTAAATTCATCATCTCAACCCAGAGTGTCTGGTCTCCCTGCTCTTTCTG CATGGTTGTGTCCCTAGTCCTAAGCTTTGGTTCTTTAGGGTGACTGTGGTAAGAAGGATATTTAATCATGACATG CACGGACACGTACATATTTAACTGAAACAAGTTTTACCAAACAGTATTTACTCGTGATGTGCGTAGTGCATTCTG ATATTTTTGAGCCATTCTATTGTGTTCTACTTCACCTAAAAAAATAAAATAAAAATGTTGATCAAG

811/2682 FIGURE 743

MAPPSVFAEVPQAQPVLVFKLTADFREDPDPRKVNLGVGAYRTDDCHPWVLPVVKKVEQKIANDNSLNHEYLPIL GLAEFRSCASRLALGDDSPALKEKRVGGVQSLGGTGALRIGADFLARWYNGTNNKNTPVYVSSPTWENHNAVFSA AGFKDIRSYRYWDAEKRGLDLQGFLNDLENAPEFSIVVLHACAHNPTGIDPTPEQWKQIASVMKHRFLFPFFDSA YQGFASGNLERDAWAIRYFVSEGFEFFCAQSFSKNFGLYNERVGNLTVVGKEPESILQVLSQMEKIVRITWSNPP AQGARIVASTLSNPELFEEWTGNVKTMADRILTMRSELRARLEALKTPGTWNHITDQIGMFSFTGLNPKQVEYLV NEKHIYLLPSGRINVSGLTTKNLDYVATSIHEAVTKIQ

812/2682 FIGURE 744

GCACGAGCTGCGGCTCCGCTCGCCAACGAGATCTTTCGAGATCTTCTCCGCCCCCGCTACCGGCGCCCTCCT CTGCGGCCACTGAGCCGGAGCCGGCCTGAGCAGCGCTCTCGGTTGCAGTACCCACTGGAAGGACTTAGGCGCTCG TGGGCTTCCAGAGCTGCTACGTCGCTGTGGCCCGCCGCGCGGCATCGAGACTATCGCTAATGAGTATAGCGACC GCTGCACGCCGGCTTGCATTTCTTTTGGTCCTAAGAATCGTTCAATTGGAGCAGCAGCTAAAAGCCAGGTAATTT CTAATGCAAAGAACACAGTCCAAGGATTTAAAAGATTCCATGGCCGAGCATTCTCTGATCCATTTGTGGAGGCAG AAAAATCTAACCTTGCATATGATATTGTGCAGTTGCCTACAGGATTAACAGGTATAAAGGTGACATATATGGAGG AAGAGCGAAATTTTACCACTGAGCAAGTGACTGCCATGCTTTTGTCCAAACTGAAGGAGACAGCCGAAAGTGTTC TTAAGAAGCCTGTAGTTGACTGTTGTTTCGGTTCCTTGTTTCTATACTGATGCAGAAAGACGATCAGTGATGG TCTATAAGCAGGATCTTCCTGCCTTAGAAGAGAAACCAAGAAATGTAGTTTTTGTAGACATGGGCCACTCTGCTT ATCAAGTTTCTGTATGTGCATTTAATAGAGGAAAACTGAAAGTTCTGGCCACTGCATTTGACACGACATTGGGAG GTAGAAAATTTGATGAAGTGTTAGTAAATCACTTCTGTGAAGAATTTGGGAAGAAATACAAGCTAGACATTAAGT CCAAAATCCGTGCATTATTACGACTCTCCAGGAGTGTGAGAAACTCAAGAAATTGATGAGTGCAAATGCTTCAG ATCTCCCTTTGAGCATTGAATGTTTTATGAATGATGTTGATGTATCTGGAACTATGAATAGAGGCAAATTTCTGG AAGATATTTATGCAGTGGAGATAGTTGGTGGTGCTACACGAATCCCTGCGGTAAAAGAGAAGATCAGCAAATTTT TCGGTAAAGAACTTAGTACAACATTAAATGCTGATGAAGCTGTCACTCGAGGCTGTGCATTGCAGTGTGCCATCT TATCGCCTGCTTTCAAAGTCAGAGAATTTTCTATCACTGATGTAGTACCATATCCAATATCTCTGAGATGGAATT CTCCAGCTGAAGAAGGGTCAAGTGACTGTGAAGTCTTTTCCAAAAATCATGCTGCTCCTTTCTCTAAAGTTCTTA CATTTTATAGAAAGGAACCTTTCACTCTTGAGGCCTACTACAGCTCTCCTCAGGATTTGCCCTATCCAGATCCTG CTATAGCTCAGTTTTCAGTTCAGAAAGTCACTCCTCAGTCTGATGGCTCCAGTTCAAAAGTGAAAGTCAAAGTTC GAGTAAATGTCCATGGCATTTTCAGTGTGTCCAGTGCATCTTTAGTGGAGGTTCACAAGTCTGAGGAAAATGAGG AGCCAATGGAAACAGATCAGAATGCAAAGGAGGAAGAAGATGCAAGTGGACCAGGAGGAACCACATGTTGAAG AGCAACAGCAGCAGACACCAGCAGAAAATAAGGCAGAGTCTGAAGAAATGGAGACCTCTCAAGCTGGATCCAAGG ATAAAAAGATGGACCAACCACCCCAAGCCAAGAAGGCAAAAGTGAAGACCAGTACTGTGGACCTGCCAATCGAGA ATCAGCTATTATGGCAGATAGACAGAGAGATGCTCAACTTGTACATTGAAAATGAGGGTAAGATGATCATGCAGG ATAAACTGGAGAAGGAGCGGAATGATGCTAAGAACGCAGTGAGGGAATATGTGTATGAAATGAGAGACAAGCTTA GTGGTGAATATGAGAAGTTTGTGAGTGAAGATGGTCGTAACAGTTTTACTTTGAAACTGGAAGATACTGAAAATT GGTTGTATGAGGATGGAGAAGACCAGCCAAAGCAAGTTTATGTTGATAAGTTGGCTGAATTAAAAAAATCTAGGTC AACCTATTAAGATACGTTTCCAGGAATCTGAAGAACGACCAAAATTATTTGAAGAACTAGGGAAACAGATCCAAC AGTATATGAAAATAATCAGCTCTTTCAAAAACAAGGAGGACCAGTATGATCATTTGGATGCTGCTGACATGACAA AGGTAGAAAAAGCACAAATGAAGCAATGGAGTGGATGAATAACAAGCTAAATCTGCAGAACAAGCAGAGTTTGA CCATGGATCCAGTTGTCAAGTCAAAAGAGATTGAAGCTAAAATTAAGGAGCTGACAAGTACTTGTAGCCCTATAA TTTCAAAGCCCAAACCCAAAGTGGAACCTCCAAAAGAGGAACAAAAAAATGCAGAGCAGAATGGACCAGTGGATG GACAAGGAGACAACCCAGGCCCCCAGGCTGCTGAGCAGGGTACAGACACAGCTGTGCCTTCGGATTCAGACAAGA AGCTTCCTGAAATGGACATTGATTGATTCCAACACTTGTTTCTATTAAAACAGACTATTATAAA

813/2682 FIGURE 745

MSVVGIDLGFQSCYVAVARAGGIETIANEYSDRCTPACISFGPKNRSIGAAAKSQVISNAKNTVQGFKRFHGRAF SDPFVEAEKSNLAYDIVQLPTGLTGIKVTYMEEERNFTTEQVTAMLLSKLKETAESVLKKPVVDCVVSVPCFYTD AERRSVMDATQIAGLNCLRLMNETTAVALAYGIYKQDLPALEEKPRNVVFVDMGHSAYQVSVCAFNRGKLKVLAT AFDTTLGGRKFDEVLVNHFCEEFGKKYKLDIKSKIRALLRLSQECEKLKKLMSANASDLPLSIECFMNDVDVSGT MNRGKFLEMCNDLLARVEPPLRSVLEQTKLKKEDIYAVEIVGGATRIPAVKEKISKFFGKELSTTLNADEAVTRG CALQCAILSPAFKVREFSITDVVPYPISLRWNSPAEEGSSDCEVFSKNHAAPFSKVLTFYRKEPFTLEAYYSSPQ DLPYPDPAIAQFSVQKVTPQSDGSSSKVKVKVRVNVHGIFSVSSASLVEVHKSEENEEPMETDQNAKEEEKMQVD QEEPHVEEQQQQTPAENKAESEEMETSQAGSKDKKMDQPPQAKKAKVKTSTVDLPIENQLLWQIDREMLNLYIEN EGKMIMQDKLEKERNDAKNAVREYVYEMRDKLSGEYEKFVSEDGRNSFTLKLEDTENWLYEDGEDQPKQVYVDKL AELKNLGQPIKIRFQESEERPKLFEELGKQIQQYMKIISSFKNKEDQYDHLDAADMTKVEKSTNEAMEWMNNKLN LQNKQSLTMDPVVKSKEIEAKIKELTSTCSPIISKPKPKVEPPKEEQKNAEQNGPVDGQGDNPGPQAAEQGTDTA VPSDSDKKLPEMDID

814/2682 FIGURE 746

ACTAGTCCTCGACTCACGGTGAGGGAATGGACCGACACGGGTATTGTACCGCTGAGGGAAAGGAGCGGGACTCCG GACCTCCAGGAGTGCAAGGATGATGCTGAAAGGAATAACAAGGCTTATCTCTAGGATCCATAAGTTGGACCCTGG GCGTTTTTTACACATGGGGACCCAGGCTCGCCAAAGCATTGCTGCTCACCTAGATAACCAGGTTCCAGTTGAGAG TCCGAGAGCTATTTCCCGCACCAATGAGAATGACCCGGCCAAGCATGGGGATCAGCACGAGGGTCAGCACTACAA CATCTCCCCCCAGGATTTGGAGACTGTATTTCCCCATGGCCTTCCTCCTCGCTTTGTGATGCAGGTGAAGACATT CAGTGAAGCTTGCCTGATGGTAAGGAAACCAGCCCTAGAACTTCTGCATTACCTGAAAAAACACCAGTTTTGCTTA TCCAGCTATACGATATCTTCTGTATGGAGAGAGAGGGAACAGGAAAAACCCTAAGTCTTTGCCATGTTATTCATTT CTGTGCAAAACAGGACTGGCTGATACTACATATTCCAGATGCTCATCTTTGGGTGAAAAATTGTCGGGATCTTCT GCAGTCCAGCTACAACAACAGCGCTTTGATCAACCTTTAGAGGCTTCAACCTGGCTGAAGAATTTCAAAACTAC AAATGAGCGCTTCCTGAACCAGATAAAAGTTCAAGAGAAGTATGTCTGGAATAAGAGAAAGCACTGAGAAAGG GAGTCCTCTGGGAGAAGTGGTTGAACAGGGCATAACACGGGTGAGGAACGCCACAGATGCAGTTGGAATTGTGCT GGGAAGAACCACTCTGAAAAGAGAAGATAAAAGCCCGATTGCCCCCGAGGAATTAGCACTTGTTCACAACTTGAG GAAAATGATGAAAAATGATTGGCATGGAGGCGCCATTGTGTCGGCTTTGAGCCAGACTGGGTCTCTCTTTAAGCC GGTTTCCAACTATAACCCAAAGGAATTTGAAAGTTGTATTCAGTATTATTTGGAAAACAATTGGCTTCAACATGA GAAAGCTCCTACAGAAGAAGGGGAAAAAAGAGCTGCTGTTCCTAAGTAACGCGAACCCCTCGCTGCTGGAGCGGCA CTGTGCCTACCTC<u>TAA</u>GCCAAGATCACAGCATGTGAGGAAGACAGTGGACATCTGCTTTATGCTGGACCCAGTAA GATGAGGAAGTCGGGCAGTACACAGGAAGAGGAGCCAGGCCCTTGTACCTATGGGATTGGACAGGACTGCAGTTG GCTCTGGACCTGCATTAAAATGGGTTTCACTGTGAATGCGTGACAATAAGATATTCCCTTGTTCCTAAAACTTTA TATCAGTTTATTGGATGTGGTTTTTCACATTTAAGATAATTATGGCTCTTTTCCTAAAAAATAAAATATCTTTCT

815/2682 FIGURE 747

MMLKGITRLISRIHKLDPGRFLHMGTQARQSIAAHLDNQVPVESPRAISRTNENDPAKHGDQHEGQHYNISPQDL ETVFPHGLPPRFVMQVKTFSEACLMVRKPALELLHYLKNTSFAYPAIRYLLYGEKGTGKTLSLCHVIHFCAKQDW LILHIPDAHLWVKNCRDLLQSSYNKQRFDQPLEASTWLKNFKTTNERFLNQIKVQEKYVWNKRESTEKGSPLGEV VEQGITRVRNATDAVGIVLKELKRQSSLGMFHLLVAVDGINALWGRTTLKREDKSPIAPEELALVHNLRKMMKND WHGGAIVSALSQTGSLFKPRKAYLPQELLGKEGFDALDPFIPILVSNYNPKEFESCIQYYLENNWLQHEKAPTEE GKKELLFLSNANPSLLERHCAYL

816/2682 FIGURE 748

ATGACGAAGAACGAGAAGAAGTCCCTCAACCAGAGCCTGGCCGAGTGGAAGCTCTTCATCTACAACCCGACCACC GGAGAATTCCTGGGGCGCACCGCCAAGAGCTGGGGTTTGATCTTGCTCTTCTACCTAGTTTTTTATGGGTTCCTG GCTGCACTCTTCTCATTCACGATGTGGGTTATGCTTCAGACTCTCAACGATGAGGTTCCAAAAATACCGTGACCAG ATTCCTAGCCCAGGACTCATGGTTTTTCCAAAACCAGTGACCGCATTGGAATATACATTCAGTAGGTCTGATCCA ACTTCGTATGCAGGGTACATTGAAGACCTTAAGAAGTTTCTAAAACCATATACTTTAGAAGAACAGAAGAACCTC ACAGTCTGTCCTGATGGAGCACTTTTTGAACAGAAGGGTCCAGTTTATGTTGCATGTCAGTTTCCTATTTCATTA $\tt CTTCAAGCATGCAGTGGTATGAATGATCCTGATTTTGGCTATTCTCAAGGAAACCCTTGTATTCTTGTGAAAATG$ AACAGAATAATTGGATTAAAGCCTGAAGGAGTGCCAAGGATAGATTGTGTTTCAAAGAATGAAGATATACCAAAT GTAGCAGTTTATCCTCATAATGGAATGATAGACTTAAAATATTTCCCATATTATGGGAAAAAACTGCATGTTGGG TATCTACAGCCATTGGTTGCTGTTCAGGTCAGCTTTGCTCCTAACAACACTGGGAAAGAAGTAACAGTTGAGTGC AAGATTGATGGATCAGCCAACCTAAAAAGTCAGGATGATCGTGACAAGTTTTTGGGACGAGTTATGTTCAAAATC TGGACCTTCCATTCTAGAATTATGAGACCACCTTGGAGAAAGGTGTGTGGTACATGACATTGGGTTACATCATAA CGTGCTTCCAGATCATAGTGTTCAGTGTCCTCTGAAGTAACTGCCTGTTGCCTCTGCTGCCCTTTGAACCAGTGT ACAGTCGCCAGATAGGGACCGGTGAACACCTGATTCCAAACATGTAGGATGGGGGTCTTGTCCTCTTTTTATGTG GTTTAATTGCCAAGTGTCTAAAGCTTAATATGCCGTGCTATGTAAATATTTTATGGATATAACAACTGTCATATT TTGATGTCAACAGAGTTTTAGGGATAAAATGGTACCCGGCCAACATCAAGTGACTTTATAGCTGCAAGAAATGTG **AAACATGTAAAAAAAAAACTGGGATTAATTTTTAGTGTTGGAACTGCCTCTTATTTTAGGCTGTAGATAAAATA** GCATTTTTAGGTTAGCCAGTGTGACTATGCACCTAATTTTTTATGAGATTAAATTCATAAGACTTAATTTGTACA ATAGTTTGTGAAATATCTTGTTACTGCTTTTATTTAGCAGACTGTGGACTGTAATAAAGTATATAAATTGTGAAA TATAAAAACTTGGAACTTATTCAAAGCTT

817/2682 FIGURE 749

MTKNEKKSLNQSLAEWKLFIYNPTTGEFLGRTAKSWGLILLFYLVFYGFLAALFSFTMWVMLQTLNDEVPKYRDQ IPSPGLMVFPKPVTALEYTFSRSDPTSYAGYIEDLKKFLKPYTLEEQKNLTVCPDGALFEQKGPVYVACQFPISL LQACSGMNDPDFGYSQGNPCILVKMNRIIGLKPEGVPRIDCVSKNEDIPNVAVYPHNGMIDLKYFPYYGKKLHVG YLQPLVAVQVSFAPNNTGKEVTVECKIDGSANLKSQDDRDKFLGRVMFKITARA

818/2682 FIGURE 750

819/2682 FIGURE 751

 ${\tt MVKQ1ESKTAFQEALDAAGDKLVVVDFSATWCGPCKMINPFFHSLSEKYSNVIFLEVDVDDCQDVASECEVKCTP}\\ {\tt TFQFFKKGQKVGEFSGANKEKLEATINELV}$

820/2682 FIGURE 752

821/2682 FIGURE 753

 ${\tt MGDVEKGKKIFIMKCSQYHTVEKGGKHKTGPNLHGLFGRKTGQAPGYSYTAANKNKGIIWGEDTLMEYLENPKKYIFGTKMIFVGIKKKEERADLIAYLKKATNE}$

822/2682 FIGURE 754

 $\tt CCGGCGGCGCCTCAGGTCGCGGGGCGCCTAGGCCTGGGTTGTCCTTTGCATCTGCACGTGTTCGCAGTCGTTTCC$ GCCTCGCCTTTCCGGCAGCTCCTGCAGCCGGCACCCCGGCTGTGCACCCGGCCCTTCGGGCTGCTCAGCGTGCGC ${\tt AAAACCCTCCCTAAGATGTCTGGAGGTTGGGAGCTGGAACTGAATGGGACAGAAGCGAAATTAGTGCGGAAAGTT}$ GCCGGGGAAAAAATCACGGTCACTTTCAACATTAACAACAGCATCCCACCAACATTTGATGGTGAGGAGGAACCC TCGCAAGGGCAGAAGGTTGAAGAACAGGAGCCTGAACTGACATCAACTCCCAATTTCGTGGTTGAAGTTATAAAG AATGATGATGGCAAGAAGGCCCTTGTGTTGGACTGTCATTATCCAGAGGATGAGGTTGGACAAGAAGACGAGGCT GAGAGTGACATCTTCTCTATCAGGGAAGTTAGCTTTCAGTCCACTGGCGAGTCTGAATGGAAGGATACTAATTAT AACACTTTTGCAGATGAGCTGGTGGAGCTCAGCACAGCCCTGGAGCACCAGGAGTACATTACTTTTCTTGAAGAC CTCAAGAGTTTTGTCAAGAGCCAGTAGAGCAGACAGATGCTGAAAGCCATAGTTTCATGGCAGGCTTTGGCCAGT GAACAAATCCTACTCTGAAGCTAGACATGTGCTTTGAAATGATTATCATCCTAATATCATGGGGGAAAAAATACC GTATAACATGATAGACATAAAATTGGTTTATCTCCTCCGCTGAGTCTTCCTAGAAGTACCTGCTGGGTTCTCAGT TCCAGTTCCCATCCTTTGATTGATCACTCTCCCTGACATCCACCTGTATGACTTTGTCACCAAATGCTGTCTTCT

823/2682 FIGURE 755

824/2682 FIGURE 756

TGGACTTGGATCCGAGGCAGACGAGGAAGCTGAGAAAACCCTGGCGTTGACCCCGTGGACCTGGGCGCCCCGGGA AGGTCCAGCGCTTGGTCCAGGCAGGCGGGGATGTGCGGTGACCACCCTGGTCCTGAAAAGTCCAGCCCCGAATCT CCCTCCCTAGACCTGGAGGCCTGGAACAGCCAGCCGCCCACGGACGCCAGAGCCGGGAACCCTGACGGCACT TAGCTGCTGACAACCACCTGCTCCGTGGACGCCTGAAACACCAGTCTTTGGGGCCAGTGCCTCAGTTTCAATCC AGGTAACCTTTAAATGAAACTTGCCTAAAATCTTAGGTCATACACAGAAGAGACTCCAATCGACAAGAAGCTGGA AAAGAATGATGTTGTCCTTAAACAACCTACAGAATATCATCTATAACCCGGTAATCCCGTATGTTGGCACCATTC ATCTGCAGAATGGCAGCAGTGTGAAACCTCGAGCCGATGTGGCCTTTCATTTCAATCCTCGTTTCAAAAGGGCCG GCTGCATTGTTTGCAATACTTTGATAAATGAAAAATGGGGACGGGAAGAGATCACCTATGACACGCCTTTCAAAA GAGAAAAGTCTTTTGAGATCGTGATTATGGTGCTAAAGGACAAATTCCAGGTGGCTGTAAATGGAAAACATACTC TGCTCTATGGCCACAGGATCGGCCCAGAGAAAATAGACACTCTGGGCATTTATGGCAAAGTGAATATTCACTCAA TTGGTTTTAGCTTCAGCTCGGACTTACAAAGTACCCAAGCATCTAGTCTGGAACTGACAGAGATAAGTAGAGAAA ATGTTCCAAAGTCTGGCACGCCCCAGCTTCAGACTGTCTCCCCTCCTGGGATTTACAGGGTCATGGCTCTGAAA CATTCTGTAGTGTTCTTTGGACACGAGTTTTCCTGGAGATCGCTTTCTGCAGGCCTATTGGTCTGACTGTGGCTT CTTTTCAGAGCCTGCCATTCGCTGCAAGGTTGAACACCCCCATGGGCCCTGGACGAACTGTCGTCGTTAAAGGAG AAGTGAATGCAAATGCCAAAAGCTTTAATGTTGACCTACTAGCAGGAAAATCAAAGGATATTGCTCTACACTTGA ACCCACGCCTGAATATTAAAGCATTTGTAAGAAATTCTTTTCTTCAGGAGTCCTGGGGAGAAGAAGAAGAAAAATA TTACCTCTTTCCCATTTAGTCCTGGGATGTACTTTGAGATGATAATTTACTGTGATGTTAGAGAATTCAAGGTTG CAGTAAATGGCGTACACAGCCTGGAGTACAAACACAGATTTAAAGAGCTCAGCAGTATTGACACGCTGGAAATTA ATGGAGACATCCACTTACTGGAAGTAAGGAGCTGG<u>TAG</u>CCTACCTACACAGCTGCTACAAAAAACCAAAATACAGA ATGGCTTCTGTGATACTGGCCTTGCTGAAACGCATCTCACTGTCATTCTATTGTTTATATTGTTAAAATGAGCTT GTGCACCATTAGATCCTGCTGGGTGTTCTCAGTCCTTGCCATGAAGTATGGTGGTGTCTAGCACTGAATGGGGAA ACTGGGGGCAGCAACACTTATAGCCAGTTAAAGCCACTCTGCCCTCTCTCCTACTTTGGCTGACTCTTCAAGAAT TTCTGTGCTCTATTGCTGCGCACTGCTTTTTCTACAGGCATTACATCAACTCCTAAGGGGTCCTCTGGGATTAGT TAAGCAGCTATTAAATCACCCGAAGACACTAATTTACAGAAGACACAACTCCTTCCCCAGTGATCACTGTCATAA TATTAGCTGCAAGCTTTACCAAGTAATTGGCATGACATCTGAGCACAGAAATTAAGGCAAAAAACCAAAGCAAAA CAAATACATGGTGCTGAAATTAACTTGATGCCAAGCCCAAGGCAGCTGATTTCTGTGTATTTGAACTTAGGGCAA ATCAGAGTCTACACAGACGCCTACAGAAAGTTTCAGGAAGAGGGCAAGATGCATTCAATTTGAAAGATATTTATGG GGACCCACAAAGCAGGCAGAGGTAATGCAGAAATCTGTTTTGTTCCCATGAAATCACCAATCAAGGCCTCCGTTC TTCTAAAGATTAGTCCATCATTAGCAACTGAGATCAAAGCACTCTTCCACTTTACGTGATTAAAATCAAACC

825/2682 FIGURE 757

MLSLNNLQNIIYNPVIPYVGTIPDQLDPGTLIVICGHVPSDADRFQVDLQNGSSVKPRADVAFHFNPRFKRAGCI VCNTLINEKWGREEITYDTPFKREKSFEIVIMVLKDKFQVAVNGKHTLLYGHRIGPEKIDTLGIYGKVNIHSIGF SFSSDLQSTQASSLELTEISRENVPKSGTPQLQTVSPSWDLQGHGSETFCSVLWTRVFLEIAFCRPIGLTVASFQ SLPFAARLNTPMGPGRTVVVKGEVNANAKSFNVDLLAGKSKDIALHLNPRLNIKAFVRNSFLQESWGEEERNITS FPFSPGMYFEMIIYCDVREFKVAVNGVHSLEYKHRFKELSSIDTLEINGDIHLLEVRSW

826/2682 FIGURE 758

CGCGCGCGCGCATTTTATTCAGGCGACGCTTAAGGGAGCCGGCCCCGGTGCATTGTGGGAGGCCCGCG CCGTTTTCGGGAGGAGGCGGAGGGGCCAAAGCGAGCCGGTGGATCCATAAAGAACCCAGCCAACCCGCAGAGGG ${\tt AGGGGAGGGCTGAGCTGTGAGGAGAGGGGGCCCAAGAACC} \underline{{\tt ATG}} \texttt{TCTACGCGGGAGTCCTTTAACCCGGAAAGT}$ TACGAATTGGACAAAAGCTTCCGGCTAACCAGATTCACTGAACTGAAGGGCACAGGCTGCAAAGTGCCCCAAGAT GTCCTGCAAAAATTGCTGGAATCTTTACAGGAGAACCACTTCCAAGAAGATGAGCAGTTTCTGGGAGCCGTTATG GATTACATTTACCCGATCGTAGACGACCCTTACATGATGGGCAGGATAGCGTGTGCCAATGTCCTCAGTGACCTC TATGCAATGGGGGTCACGGAATGTGACAATATGCTGATGCTCCTTGGAGTCAGTAATAAATGACCGACAGGGAA AGGGATAAAGTGATGCCTCTGATTATCCAAGGTTTTAAAGACGCAGCTGAGGAAGCAGGAACGTCTGTAACAGGC GGCCAAACAGTACTAAACCCCTGGATTGTCCTGGGAGGAGTGGCTACCACTGTCTGCCAACCCAATGAATTTATC ATGCCAGACAATGCAGTGCCAGGGGACGTGCTGGTGCTGACAAAACCCCTGGGGACACAGGTGGCAGTGGCTGTG CACCAGTGGCTGGATATCCCTGAGAAATGGAATAAGATTAAACTAGTGGTCACCCAAGAAGATGTAGAGCTGGCC TACCAGGAGGCGATGATGAACATGGCGAGGCTCAACAGGACAGCTGCAGGACTCATGCACACGTTCAATACCCAC GCCGCCACTGACATCACGGGCTTCGGGATTTTGGGCCATGCGCAGAACCTGGCCAAGCAGCAGAACGAAGGAACGAGGTG TCGTTTGTAATTCACAACCTCCCGGTGCTGGCCAAGATGGCTGCGGTGAGCAAGGCCTGCGGAAACATGTTCGGC TGTGCAGAGATAAAGTCCCCCAAATATGGTGAAGGCCACCAAGCATGGATTATTGGGATTGTAGAGAAGGGCCAAC CGCACAGCCAGAATCATAGACAAACCCCGGATCATCGAGGTCGCACAAGTGGCCACTCAAAACG**TGA**ATCCCA CACCCGGGGCCACCTCTTAATCTAGACAGAAATAGCTGTTTTGGTTTTGTTTTTAAATAGATCTATTTCCCTTATC ACTTCAATTAAAGACTATAAACAACAAAAATCTCATTGTGTCTACACATCGGGGTGACCTTAGGTCGGTTTGTAA GTGGATACAATTAATAAAATAAAATCCATTGCCTTTTTTTCCTGTTACATTAACTGAAGATCGACCTAATCTTGA GGCAGCTTCTGAGTTGAGAATT

827/2682 FIGURE 759

MSTRESFNPESYELDKSFRLTRFTELKGTGCKVPQDVLQKLLESLQENHFQEDEQFLGAVMPRLGIGMDTCVIPL RHGGLSLVQTTDYIYPIVDDPYMMGRIACANVLSDLYAMGVTECDNMLMLLGVSNKMTDRERDKVMPLIIQGFKD AAEEAGTSVTGGQTVLNPWIVLGGVATTVCQPNEFIMPDNAVPGDVLVLTKPLGTQVAVAVHQWLDIPEKWNKIK LVVTQEDVELAYQEAMMNMARLNRTAAGLMHTFNTHAATDITGFGILGHAQNLAKQQRNEVSFVIHNLPVLAKMA AVSKACGNMFGLMHGTCPETSGGLLICLPREQAARFCAEIKSPKYGEGHQAWIIGIVEKGNRTARIIDKPRIIEV AHKWPLKT

828/2682 FIGURE 760

TGTGGTGACCCCCGCCCCCCCCCCCCCCCTCCCTTCCCACCCCACCCCCACCCCCATCCCCAGTTCGAGCCGCC GCCCGAAAGGCCGGGCCGTCGTCTTAGGAGGAGTCGCCGCCGCCGCCACCTCCGCCATGATCACCATTC TCGAGAAGACCGTGTCTCCCGATCGGCTGGAGCTGGAAGCGGCGCAGAAGTTCCTGGAGCGTGCGGCCGTGGAGA ACCTGCCCACTTTCCTTGTGGAACTGTCCAGAGTGCTGGCAAATCCAGGAAACAGTCAGGTTGCCAGAGTTGCAG CTGGTCTACAAATCAAGAACTCTTTGACATCTAAAGATCCAGATATCAAGGCACAATATCAGCAGAGGTGGCTTG CTATTGATGCTAATGCTCGACGAGAAGTCAAGAACTATGTTTTGCAGACATTGGGTACAGAAACTTACCGGCCTA GTTCTGCCTCACAGTGTGTGGCTGGTATTGCTTGTGCAGAGATCCCAGTAAACCAGTGGCCAGAACTCATTCCTC AGCTGGTGGCCAATGTCACAAACCCCAACAGCACAGAGCACATGAAGGAGTCGACATTGGAAGCCATCGGTTATA TTTGCCAAGATATAGACCCAGAGCAGCTACAAGATAAATCCAATGAGATTCTGACTGCCATAATCCAGGGGATGA GGAAAGAAGAGCCTAGTAATAATGTGAAGCTAGCTGCTACGAATGCACTCCTGAACTCATTGGAGTTCACCAAAG CAAACTTTGATAAAGAGTCTGAAAGGCACTTTATTATGCAGGTGGTCTGTGAAGCCACACAGTGTCCAGATACGA GGGTACGAGTGGCTGCTTTACAGAATCTGGTGAAGATAATGTCCTTATATTATCAGTACATGGAGACATATATGG GTCCTGCTCTTTTTGCAATCACAATCGAAGCAATGAAAAGTGACATTGATGAGGTGGCTTTACAAGGGATAGAAT TCTGGTCCAATGTCTGTGATGAGGAAATGGATTTGGCCATTGAAGCTTCAGAGGCAGCAGAACAAGGACGGCCCC **AACAGGACGAAAATGATGATGACGATGACTGGAACCCCTGCAAAGCAGCAGGGGTGTGCCTCATGCTTCTGGCCA** CCTGCTGTGAAGATGACATTGTCCCACATGTCCTCCCCTTCATTAAAGAACACATCAAGAACCCAGATTGGCGGT ACCGGGATGCAGCAGTGATGGCTTTTGGTTGTATCTTGGAAGGACCAGAGCCCAGTCAGCTCAAACCACTAGTTA TACAGGCTATGCCCACCCTAATAGAATTAATGAAAGACCCCAGTGTAGTTGTTCGAGATACAGCTGCATGGACTG TAGGCAGAATTTGTGAGCTGCTTCCTGAAGCTGCCATCAATGATGTCTACTTGGCTCCCCTGCTACAGTGTCTGA TTGAGGGTCTCAGTGCTGAACCCAGAGTGGCTTCAAATGTGTGCTGGGCTTTCTCCAGTCTGGCTGAAGCTGCTT TTCAGAAGCTCCTAGAGACTACAGACAGACCTGATGGACACCAGAACAACCTGAGGAGTTCTGCATATGAATCTC TGATGGAAATTGTGAAAAACAGTGCCAAGGATTGTTATCCTGCTGTCCAGAAAACGACTTTGGTCATCATGGAAC GACTGCAACAGGTTCTTCAGATGGAGTCACATATCCAGAGCACATCCGATAGAATCCAGTTCAATGACCTTCAGT CTTTACTCTGTGCAACTCTTCAGAATGTTCTTCGGAAAGTGCAACATCAAGATGCTTTGCAGATCTCTGATGTGG TTATGGCCTCCTGTTAAGGATGTTCCAAAGCACAGCTGGGTCTGGGGGAGTACAAGAGGATGCCCTGATGGCAG TTAGCACACTGGTGGAAGTGTTGGGTGGTGAATTCCTCAAGTACATGGAGGCCTTTAAACCCTTCCTGGGCATTG GATTAAAAAATTATGCTGAATACCAGGTTTGTTTGGCAGCTGTGGGCTTAGTGGGAGACTTGTGCCGTGCCCTGC AATCCAACATCATACCTTTCTGTGACGAGGTGATGCAGCTGCTTCTGGAAAATTTGGGGAATGAGAACGTCCACA GGTCTGTGAAGCCGCAGATTCTGTCAGTGTTTGGTGATATTGCCCTTGCTATTGGAGGAGAGTTTAAAAAATACT TAGAGGTTGTATTGAATACTCTTCAGCAGGCCTCCCAAGCCCAGGTGGACAAGTCAGACTATGACATGGTGGATT ATCTGAATGAGCTAAGGGAAAGCTGCTTGGAAGCCTATACTGGAATCGTCCAGGGATTAAAGGGGGGATCAGGAGA ACGTACACCCGGATGTGATGCTGGTACAACCCAGAGTAGAATTTATTCTGTCTTTCATTGACCACATTGCTGGAG ATGAGGATCACACAGATGGAGTAGTAGCTTGTGCTGCTGGACTAATAGGGGACTTATGTACAGCATTTGGGAAGG ATGTACTGAAATTAGTAGAAGCTAGGCCAATGATCCATGAATTGTTAACTGAAGGGCGGAGATCGAAGACTAACA AAGCAAAAACCCTTGCTACATGGGCAACAAAAGAACTGAGGAAACTGAAGAACCAAGCT**TGA**TCTGTTACCATTG GGATGATAACCTGAGGACCCCCACTGGAAATCTCCCATCTTTTGAAAAACCTGGAAGTGAGGAGTGTGCACGGAT GCTGAATGTTTGGGAATGAGGGATGAGTGAGTGAGGCTTGAAAACACACCACATTGAAAATCCTGCCACAGCAG

829/2682 FIGURE 761

MELITILEKTVSPDRLELEAAQKFLERAAVENLPTFLVELSRVLANPGNSQVARVAAGLQIKNSLTSKDPDIKAQ
YQQRWLAIDANARREVKNYVLQTLGTETYRPSSASQCVAGIACAEIPVNQWPELIPQLVANVTNPNSTEHMKEST
LEAIGYICQDIDPEQLQDKSNEILTAIIQGMRKEEPSNNVKLAATNALLNSLEFTKANFDKESERHFIMQVVCEA
TQCPDTRVRVAALQNLVKIMSLYYQYMETYMGPALFAITIEAMKSDIDEVALQGIEFWSNVCDEEMDLAIEASEA
AEQGRPPEHTSKFYAKGALQYLVPILTQTLTKQDENDDDDDWNPCKAAGVCLMLLATCCEDDIVPHVLPFIKEHI
KNPDWRYRDAAVMAFGCILEGPEPSQLKPLVIQAMPTLIELMKDPSVVVRDTAAWTVGRICELLPEAAINDVYLA
PLLQCLIEGLSAEPRVASNVCWAFSSLAEAAYEAADVADDQEEPATYCLSSSFELIVQKLLETTDRPDGHQNNLR
SSAYESLMEIVKNSAKDCYPAVQKTTLVIMERLQQVLQMESHIQSTSDRIQFNDLQSLLCATLQNVLRKVQHQDA
LQISDVVMASLLRMFQSTAGSGGVQEDALMAVSTLVEVLGGEFLKYMEAFKPFLGIGLKNYAEYQVCLAAVGLVG
DLCRALQSNIIPFCDEVMQLLLENLGNENVHRSVKPQILSVFGDIALAIGGEFKKYLEVVLNTLQQASQAQVDKS
DYDMVDYLNELRESCLEAYTGIVQGLKGDQENVHPDVMLVQPRVEFILSFIDHIAGDEDHTDGVVACAAGLIGDL
CTAFGKDVLKLVEARPMIHELLTEGRRSKTNKAKTLATWATKELRKLKNQA

830/2682 FIGURE 762

GGCACGAGGCTGCTGTTTGTCTACTTCCTCCTGCTTCCCCGCCGCCGCCGCCGCCATC<u>ATG</u>AGGGAAATCGTGCA CCCCACGGGCACCTACCACGGGGACAGCGACCTGCAGCTGGAACGCATCAACGTGTACTACAATGAGGCCACCGG CGGCAAGTACGTGCCCCGCGCCGTGCTCGTGGATCTGGAGCCCGGCACCATGGACTCCGTGCGCTCGGGGCCCTT CGGGCAGATCTTCCGGCCGGACAACTTCGTTTTCGGTCAGAGTGGTGCTGGGAACAACTGGGCCAAGGGGCACTA GGGTTTCCAGCTGACCCACTCCCTGGGTGGGGGGACTGGGTCTGGGATGGGTACCCTCCTCATCAGCAAGATCCG GGAGGAGTACCCAGACAGGATCATGAACACGTTTAGTGTGGTGCCTTCGCCCAAAGTGTCAGACACAGTGGTGGA GCCCTACAACGCCACCCTCTCAGTCCACCAGCTCGTAGAAAACACAGACGAGACCTACTGCATTGATAACGAAGC TCTCTACGACATTTGCTTCAGAACCCTAAAGCTGACCACGCCCACCTATGGTGACCTGAACCACCTGGTGTCTGC CCATGGCCGCTACCTGACGGTTGCCGCCGTGTTCAGGGGGCCGCATGTCCATGAAGGAGGTGGATGAGCAAATGCT CCCACCTCGGGGGCTAAAAATGTCCGCCACCTTCATTGGCAACAGCACGGCCATCCAGGAGCTGTTCAAGCGCAT CTCCGAGCAGTTCACGGCCATGTTCCGGCGCAAGGCCTTCCTGCACTGGTACACGGGCGAGGGCATGGACGAGAT GGAGTTCACCGAGGCCGAGAGCAACATGAATGACCTGGTGTCCGAGTACCAGCAGTACCAGGATGCCACAGCCGA $\tt GGAGGAGGCGAGTTCGAGGAGGAGGCTGAGGAGGAGGTGGCC\underline{TAG} AGCCTTCAGTCACTGGGGAAAGCAGGGAA$ GCAGTGTGAACTCTTTATTCACTCCCAGCCTGTCCTGTGGCCTGTCCCACTGTGTGCACTTGCTGTTTTCCCTGT AA

831/2682 FIGURE 763

MREIVHLQAGQCGNQIGAKFWEVISDEHGIDPTGTYHGDSDLQLERINVYYNEATGGKYVPRAVLVDLEPGTMDS VRSGPFGQIFRPDNFVFGQSGAGNNWAKGHYTEGAELVDSVLDVVRKEAESCDCLQGFQLTHSLGGGTGSGMGTL LISKIREEYPDRIMNTFSVVPSPKVSDTVVEPYNATLSVHQLVENTDETYCIDNEALYDICFRTLKLTTPTYGDL NHLVSATMSGVTTCLRFPGQLNADLRKLAVNMVPFPRLHFFMPGFAPLTSRGSQQYRALTVPELTQQMFDAKNMM AACDPRHGRYLTVAAVFRGRMSMKEVDEQMLNVQNKNSSYFVEWIPNNVKTAVCDIPPRGLKMSATFIGNSTAIQ ELFKRISEQFTAMFRRKAFLHWYTGEGMDEMEFTEAESNMNDLVSEYQQYQDATAEEEGEFEEEAEEEVA

832/2682 FIGURE 764

GGTTTCCGGAGCTGCGGCGCGCAGACTGGGAGGGGGGGCCCGGGGGTTCCGACGTCGCAGCCGAGGGAACAAGCC GGGAGCCTCGCCGCCCGTCCCCGGCACACGCGCACCCCGGCCTCTCGGCCTCTGCCGGAGAAACAGGATGGCCC AATGGAATCAGCTACAGCAGCTTGACACACGGTACCTGGAGCAGCTCCATCAGCTCTACAGTGACAGCTTCCCAA TGGAGCTGCGGCAGTTTCTGGCCCCTTGGATTGAGAGTCAAGATTGGGCATATGCGGCCAGCAAAGAATCACATG CCACTTTGGTGTTTCATAATCTCCTGGGAGAGATTGACCAGCAGTATAGCCGCTTCCTGCAAGAGTCGAATGTTC TCTATCAGCACAATCTACGAAGAATCAAGCAGTTTCTTCAGAGCAGGTATCTTGAGAAGCCAATGGAGATTGCCC GGATTGTGGCCCGGTGCCTGTGGGAAGAATCACGCCTTCTACAGACTGCAGCCACTGCGGCCCAGCAAGGGGGCC ${f AGGCCAACCACCCCACAGCAGCCGTGGTGACGGAGAAGCAGCAGCTGGAGCAGCACCTTCAGGATGTCCGGA}$ AGAGAGTGCAGGATCTAGAACAGAAAATGAAAGTGGTAGAGAATCTCCAGGATGACTTTGATTTCAACTATAAAA GAGGCCCGCCCAACATCTGCCTAGATCGGCTAGAAAACTGGATAACGTCATTAGCAGAATCTCAACTTCAGACCC GTCAACAAATTAAGAAACTGGAGGAGTTGCAGCAAAAAGTTTCCTACAAAGGGGACCCCATTGTACAGCACCGGC CGATGCTGGAGGAGAATCGTGGAGCTGTTTAGAAACTTAATGAAAAGTGCCTTTGTGGTGGAGCGGCAGCCCT GCATGCCCATGCATCCTGACCGGCCCCTCGTCATCAAGACCGGCGTCCAGTTCACTACTAAAGTCAGGTTGCTGG TCAAATTCCCTGAGTTGAATTATCAGCTTAAAATTAAAGTGTGCATTGACAAAGACTCTGGGGACGTTGCAGCTC TCAGAGGATCCCGGAAATTTAACATTCTGGGCACAAACACAAAAGTGATGAACATGGAAGAATCCAACAACGGCA GCCTCTCTGCAGAATTCAAACACTTGACCCTGAGGGAGCAGAGATGTGGGAATGGGGGCCGAGCCAATTGTGATG CTTCCCTGATTGTGACTGAGGAGCTGCACCTGATCACCTTTGAGACCGAGGTGTATCACCAAGGCCTCAAGATTG ACCTAGAGACCCACTCCTTGCCAGTTGTGGTGATCTCCAACATCTGTCAGATGCCAAATGCCTGGGCGTCCATCC TGTGGTACAACATGCTGACCAACAATCCCAAGAATGTAAACTTTTTTACCAAGCCCCCAATTGGAACCTGGGATC AAGTGGCCGAGGTCCTGAGCTGCCAGTTCTCCTCCACCACCAGGAGGACTGAGCATCGAGCAGCTGACTACAC TGGCAGAGAAACTCTTGGGACCTGGTGTGAATTATTCAGGGTGTCAGATCACATGGGCTAAATTTTTGCAAAGAAA ACATGGCTGGCAAGGGCTTCTCCTTCTGGGTCTGGCTGGACAATATCATTGACCTTGTGAAAAAGTACATCCTGG CCCTTTGGAACGAAGGGTACATCATGGGCTTTATCAGTAAGGAGCGGGAGCGGGCCATCTTGAGCACTAAGCCTC CAGGCACCTTCCTGCTAAGATTCAGTGAAAGCAGCAAAGAAGGAGGCGTCACTTTCACTTGGGTGGAGAAGGACA TCAGCGGTAAGACCCAGATCCAGTCCGTGGAACCATACACAAAGCAGCAGCTGAACAACATGTCATTTGCTGAAA TCATCATGGGCTATAAGATCATGGATGCTACCAATATCCTGGTGTCTCCACTGGTCTATCTCTATCCTGACATTC CCAAGGAGGAGCATTCGGAAAGTATTGTCGGCCAGAGAGCCAGGAGCATCCTGAAGCTGACCCAGGCGCTGCCC CATACCTGAAGACCAAGTTTATCTGTGTGACACCAACGACCTGCAGCAATACCATTGACCTGCCGATGTCCCCCC GCACTTTAGATTCATTGATGCAGTTTGGAAATAATGGTGAAGGTGCTGAACCCTCAGCAGGAGGGCAGTTTGAGT CCCTCACCTTTGACATGGAGTTGACCTCGGAGTGCGCTACCTCCCCCATGTGAGGAGCTGAGAACGGAAGCTGCA GAAAGATACGACTGAGGCGCCTACCTGCATTCTGCCACCCCTCACACACCCAAACCCCAGATCATCTGAAACTAC TAACTTTGTGGTTCCAGATTTTTTTTAATCTCCTACTTCTGCTATCTTTGAGCAATCTGGGCACTTTTAAAAATA GAGAAATGAGTGAATGTGGGTGATCTGCTTTTATCTAAATGCAAATAAGGATGTGTTCTCTGAGACCCATGATCA GGGGATGTGGCGGGGGTGGCTAGAGGGAGAAAAAGGAAATGTCTTGTGTTGTTTTTCCCCTGCCCTCCTTTC TCAGCAGCTTTTTGTTATTGTTGTTGTTGTTCTTAGACAAGTGCCTCCTGGTGCCTGCGGCATCCTTCTGCCTGT TTCTGTAAGCAAATGCCACAGGCCACCTATAGCTACATACTCCTGGCATTGCACTTTTTAACCTTGCTGACATCC AAATAGAAGATAGGACTATCTAAGCCCTAGGTTTCTTTTTAAATTAAGAAATAATAACAATTAAAGGGCAAAAAA CACTGTATCAGCATAGCCTTTCTGTATTTAAGAAACTTAAGCAGCCGGGCATGGTGGCTCACGCCTGTAATCCCA GCACTTTGGGAGGCCGAGGCGGATCATAAGGTCAGGAGATCAAGACCATCCTGGCTAACACGGTGAAACCCCGTC TCTACTAAAAGTACAAAAAATTAGCTGGGTGGTGGTGGGCGCCTGTAGTCCCAGCTACTCGGGAGGCTGAGGC AGGAGAATCGCTTGAACCTGAGAGGCGGAGGTTGCAGTGAGCCAAAATTGCACCACTGCACACTGCACTCCATCC

833/2682 FIGURE 7.65

MAQWNQLQQLDTRYLEQLHQLYSDSFPMELRQFLAPWIESQDWAYAASKESHATLVFHNLLGEIDQQYSRFLQES
NVLYQHNLRRIKQFLQSRYLEKPMEIARIVARCLWEESRLLQTAATAAQQGGQANHPTAAVVTEKQQMLEQHLQD
VRKRVQDLEQKMKVVENLQDDFDFNYKTLKSQGDMQDLNGNNQSVTRQKMQQLEQMLTALDQMRRSIVSELAGLL
SAMEYVQKTLTDEELADWKRRQQIACIGGPPNICLDRLENWITSLAESQLQTRQQIKKLEELQQKVSYKGDPIVQ
HRPMLEERIVELFRNLMKSAFVVERQPCMPMHPDRPLVIKTGVQFTTKVRLLVKFPELNYQLKIKVCIDKDSGDV
AALRGSRKFNILGTNTKVMNMEESNNGSLSAEFKHLTLREQRCGNGGRANCDASLIVTEELHLITFETEVYHQGL
KIDLETHSLPVVVISNICQMPNAWASILWYNMLTNNPKNVNFFTKPPIGTWDQVAEVLSWQFSSTTKRGLSIEQL
TTLAEKLLGPGVNYSGCQITWAKFCKENMAGKGFSFWVWLDNIIDLVKKYILALWNEGYIMGFISKERERAILST
KPPGTFLLRFSESSKEGGVTFTWVEKDISGKTQIQSVEPYTKQQLNNMSFAEIIMGYKIMDATNILVSPLVYLYP
DIPKEEAFGKYCRPESQEHPEADPGSAAPYLKTKFICVTPTTCSNTIDLPMSPRTLDSLMQFGNNGEGAEPSAGG
QFESLTFDMELTSECATSPM

834/2682 FIGURE 766

GCGAGTTGTGTGAGCCGCCAGTATGGCCGGGCTATGCCGGCGACCTGGCTACGTGCGACTGTGGGGAGCGGCG CTCCGAGGCCAGCGGACCTGCGACGCCTCTCCTTGGGCACTGTGGGGCCGAGGCCCGGCAATTGGGGGCCAA TGGCGGGGGTTTTGGGAAGCGAGCAGCCGCGGCGGAGGCGCATTCTCGGGGGGCGAGGACGCCTCCGAGGGCGGC GCGGAGGAAGGACCGGCGCGCGGGGGCACCGCGGGCGCCCGGGGAAGGCCCGGTCATAACGGCGCTCACGCCC ATGACGATCCCCGATGTGTTTCCGCACCTGCCGCTCATCGCCATCACCCGCAACCCGGTGTTCCCGCGCTTTATC AAGATTATCGAGGTTAAAAATAAGAAGTTGGTTGAGCTGCTGAGAAGGAAAGTTCGTCTCGCCCAGCCTTATGTC GGCGTCTTTCTAAAGAGAGATGACAGCAATGAGTCGGATGTGGTCGAGAGCCTGGATGAAATCTACCACACGGGG ACGTTTGCCCAGATCCATGAGATGCAGGACCTTGGGGACAAGCTGCGCATGATCGTCATGGGACACAGAAGAGTC CATATCAGCAGACAGCTGGAGGTGGAGCCCGAGGAGCCGGAGGCGGAGAACAAGCACAAGCCCCGCAGGAAGTCA AAGCGGGGCAAGAAGGAGGCGGAGGACGACCTGAGCGCCAGGCACCCGGCGGAGCTGGCGATGGAGCCCACCCCT GAGCTCCCGGCTGAGGTGCTCATGGTGGAGGTAGAGAACGTTGTCCACGAGGACTTCCAGGTCACGGAGGAGGTG AAAGCCCTGACTGCAGAGATCGTGAAGACCATCCGGGACATCATTGCCTTGAACCCTCTCTACAGGGAGTCAGTG CTGCAGATGATGCAGGCTGGCCAGCGGGTGGTGGACAACCCCATCTACCTGAGCGACATGGGCGCCGCGCTCACC GGGGCCGAGTCCCATGAGCTGCAGGACGTCCTGGAAGAGACCAATATTCCTAAGCGGCTGTACAAGGCCCTCTCC CTGCTGAAGAAGGAATTTGAACTGAGCAAGCTGCAGCAGCGCCTGGGGCGGGAGGTGGAGGAGAAGATCAAGCAG ACCCACCGTAAGTACCTGCTGCAGGAGCAGCTAAAGATCATCAAGAAGGAGCTGGGCCTGGAGAAGGACGACAAG GATGCCATCGAGGAGAAGTTCCGGGAGCGCCTGAAGGAGCTCGTGGTCCCCAAGCACGTCATGGATGTTGTGGAC GAGGAGCTGAGCAAGCTGGGCCTGCTGGACAACCACTCCTCGGAGTTCAATGTCACCCGCAACTACCTAGACTGG CTCACGTCCATCCCTTGGGGCAAGTACAGCAACGAGAACCTGGACCTGGCGCGGGCACAGGCAGTGCTGGAGGAA GACCACTACGGCATGGAGGACGTCAAGAAACGCATCCTGGAGTTCATTGCCGTTAGCCAGCTCCGCGGCTCCACC TACGTGGGCGCCATGCCCGGGAAGATCATCCAGTGTTTGAAGAAGACCAAGACGGAGAACCCCCTGATCCTCATC GACGAGGTGGACAAGATCGGCCGAGGCTACCAGGGGGACCCGTCGTCGGCACTGCTGGAGCTGCTGGACCCAGAG CAGAATGCCAACTTCCTGGACCACTACCTGGACGTGCCCGTGGACTTGTCCAAGGTGCTGTTCATCTGCACGGCC AACGTCACGGACACCATCCCCGAGCCGCTGCGAGACCGTATGGAGATGATCAACGTGTCGGGCTACGTGGCCCAG GAGAAGCTGGCCATTGCGGAGCGCTACCTGGTGCCCCAGGCTCGCGCCCTGTGTGGCTTGGATGAGAGCAAGGCC AAGCTGTCATCGGACGTGCTGACGCTGCTCATCAAGCAGTACTGCCGCGAGAGCGGTGTCCGCAACCTGCAGAAG CAAGTGGAGAAGGTGTTACGGAAATCGGCCTACAAGATTGTCAGCGGCGAGGCCGAGTCCGTGGAGGTGACGCCC GAGAACCTGCAGGACTTCGTGGGGAAGCCCGTGTTCACCGTGGAGCGCATGTATGACGTGACACCGCCCGGCGTG GTCATGGGGCTGGCCTGGACCGCAATGGGAGGCTCCACGCTGTTTGTGGAGACATCCCTGAGACGCCACAGGAC AAGGATGCCAAGGGTGACAAGGATGGCAGCCTGGAGGTGACAGGCCAGCTGGGGGAGGTGATGAAGGAGCGCC CGCATAGCCTACACCTTCGCCAGAGCCTTCCTCATGCAGCACGCCCCGCCAATGACTACCTGGTGACCTCACAC ATCCACCTGCATGTGCCCGAGGGCGCCACCCCCAAGGACGGCCCAAGCGCAGGCTGCACCATCGTCACGGCCCTG CTGTCCCTGGCCATGGGCAGGCCTGTCCGGCAGAATCTGGCCATGACTGGCGAAGTCTCCCTCACGGGCAAGATC CTGCCTGTTGGTGGCATCAAGGAGAAGACCATTGCGGCCAAGCGCGCAGGGGTGACGTGCATCGTCCTGCCAGCC GAGAACAAGAAGGACTTCTACGACCTGGCAGCCTTCATCACCGAGGGCCTGGAGGTGCACTTCGTGGAACACTAC GACTGCAGGCGGCGGATGTCAGGCCCTGTCTGGGCCAGAACTGAGCGCTGTGGGGAGCGCCCCGGACCTGGCAG TGGAGCCACCGAGCGAGCAGCTCGGTCCAGTGACCCAGATCCCAGGGACCTCAGTCGGCTTAATCAGAGTGTGGC ATAGAAGCTATTTAATGATTAAAGTCATTTGCAGTA

835/2682 FIGURE 767

MAASTGYVRLWGAARCWVLRRPMLAAAGGRVPTAAGAWLLRGQRTCDASPPWALWGRGPAIGGQWRGFWEASSRG
GGAFSGGEDASEGGAEGAGGAGGSAGAGEGPVITALTPMTIPDVFPHLPLIAITRNPVFPRFIKIIEVKNKKLV
ELLRRKVRLAQPYVGVFLKRDDSNESDVVESLDEIYHTGTFAQIHEMQDLGDKLRMIVMGHRRVHISRQLEVEPE
EPEAENKHKPRRKSKRGKKEAEDELSARHPAELAMEPTPELPAEVLMVEVENVVHEDFQVTEEVKALTAEIVKTI
RDIIALNPLYRESVLQMMQAGQRVVDNPIYLSDMGAALTGAESHELQDVLEETNIPKRLYKALSLLKKEFELSKL
QQRLGREVEEKIKQTHRKYLLQEQLKIIKKELGLEKDDKDAIEEKFRERLKELVVPKHVMDVVDEELSKLGLLDN
HSSEFNVTRNYLDWLTSIPWGKYSNENLDLARAQAVLEEDHYGMEDVKKRILEFIAVSQLRGSTQGKILCFYGPP
GVGKTSIARSIARALNREYFRFSVGGMTDVAEIKGHRRTYVGAMPGKIIQCLKKTKTENPLILIDEVDKIGRGYQ
GDPSSALLELLDPEQNANFLDHYLDVPVDLSKVLFICTANVTDTIPEPLRDRMEMINVSGYVAQEKLAIAERYLV
PQARALCGLDESKAKLSSDVLTLLIKQYCRESGVRNLQKQVEKVLRKSAYKIVSGEAESVEVTPENLQDFVGKPV
FTVERMYDVTPPGVVMGLAWTAMGGSTLFVETSLRRPQDKDAKGDKDGSLEVTGQLGEVMKESARIAYTFARAFL
MQHAPANDYLVTSHIHLHVPEGATPKDGPSAGCTIVTALLSLAMGRPVRQNLAMTGEVSLTGKILPVGGIKEKTI
AAKRAGVTCIVLPAENKKDFYDLAAFITEGLEVHFVEHYREIFDIAFPDEQAEALAVER

836/2682 FIGURE 768

GTGGGGCTGGGCCCAGCCGGACCTCAGCCTGCGGCGGCTAACTGCCGGTAGGCGTCTGTGTGCGCCGCCA AGTCGGTGGGGCGGGACGCGAGGTGTGGATGGGGGGTCGCCTTGACCTCTGCCTCAGCCAGTAGCGCAGTCTCG ${\tt GCCTCGCCGTTACGGAGATGGTGCCCTGGGTGCGGACG} {\tt ATG} {\tt GGGCAGAAGCTGAAGCAGCGGCTGCGACTGGACG}$ TGGGACGCGAGATCTGCCGCCAGTACCCGCTGTTCTGCTTCCTGCTGCTCTGTCTCAGCGCCGCCTCCCTGCTTC TTAACAGGTATATTCATATTTTAATGATCTTCTGGTCATTTGTTGCTGGAGTTGTCACATTCTACTGCTCACTAG GACCTGATTCTCTCTTACCAAATATATTCTTCACAATAAAATACAAACCCAAGCAGTTAGGACTTCAGGAATTAT TTCCTCAAGGTCATAGCTGTGCTGTTTGTGGTAAAGTGAAATGTAAACGACATAGGCCTTCTTTGCTACTTGAAA ATACAGAGTTTTTACAGCAAGCTGCTTTAGAAGAATATGGTCCAGAGCTTCATGTTGCTTTGAGAAGTCGAAGAG ATGAATTGCACTATTTAAGGAAACTTACTGAACTGCTTTTTCCTTATATTTTGCCTCCTAAAGCAACAGACTGCA CAGATACTGTGAATCATTTGCTTATCATCTTCATAGATGACAGTCCACCTGAAAAAGCAACTGAACCGGCTTCTC CTTTGGTTCCATTCTTGCAGAAATTTGCAGAACCTAGAAATAAAAAGCCATCTGTGCTGAAGTTAGAATTGAAGC AAATCAGAGAGCAACAAGATCTTTTATTTCGTTTTATGAACTTTCTGAAACAAGAAGGCGCAGTGCACGTGTTGC AGTTTTGTTTGACTGTGGAGGAATTTAATGATAGAATTTTACGACCAGAATTATCAAATGATGAAATGCTGTCTC TTCATGAAGAATTGCAGAAGATTTATAAAACATACTGTTTGGATGAAAGTATTGACAAAATTAGATTTGATCCCT TTTTTGAAGCATATGAACATGTTCTTTCCCTTTTGGAGAATGTATTTACTCCTATGTTCTGCCATAGTGATGAGT ATTTCAGACAACTTTTAAGAGGTGCAGAATCACCAACACGCAATTCAAAATTGAACAGGAACACACAGAAAAAGGG CTCCAGTGGAGGCTGTGAGCACCCTAATACTCCCCGAAACCTTGCTGCATGGAAAATTAGCATTCCATATGTAG ACTTTTTTGAGGATCCCTCCTCTGAAAGGAAGGAAAAAAAGAAATTCCTGTGTTTTTGTATTGATGTTGAAA AAAATTATGAATTCTTAAAGTCAAAGAGGGAAGAGTTCCAAGAATATCTACAGAAACTTCTGCAGCATCCAGAAC TGAGTAATAGTCAACTTCTGGCAGACTTTCTTTCCCCTAATGGTGGGGAAACACAATTTCTTGATAAGATACTAC CAGATGTAAATCTTGGGAAAATTATAAAATCTGTTCCTGGAAAACTAATGAAAGAGAAAAGGTCAGCATTTGGAAC CTTTTATCATGAATTTCATTAATTCTTGTGAGTCTCCAAAGCCTAAACCAAGTAGACCAGAACTGACCATTCTCA GCCCTACTTCAGAAAACAACAAGAAGCTTTTCAATGATCTGTTTAAAAATAATGCAAACCGTGCTGAAAATACAG GACGGGTAGTTTTCCAGGTTCCTGACTGGCTTCATCATCTCTTAATGGGAACTCGAATCCTCTTTAAAAACACCC TAACACTTCTCAGAGATGCTATATTCTGTGAAAACACTGAACCTCGCTCTCTCCAAGATAAGCAAAAAAGGAGCAA AACAGACTTTTGAAGAAATGATGAATTACATTCCAGATCTGTTAGTCAAGTGTATTGGTGAAGAAACCAAGTATG AAAGCATCAGACTTCTGTTTGATGGCTTACAGCAACCAGTACTCAACAAGCAGCTGACTTATGTTTTATTGGACA ${ t TTGTGATACAGGAACTGTTTCCAGAGCTCAATAAGGTACAAAAGGAAGTTACCTCTGTGACATCTTGGATG{ t TAA}{ t AA}$ CACTTGGATTTGGTATAGAATAACCCATTGAAATTTCTGCTGTGCGAGGGTGGTAGAAATTTACTTTTTTGGGTA

837/2682 FIGURE 769

MGQKLKQRLRLDVGREICRQYPLFCFLLLCLSAASLLLNRYIHILMIFWSFVAGVVTFYCSLGPDSLLPNIFFTI
KYKPKQLGLQELFPQGHSCAVCGKVKCKRHRPSLLLENYQPWLDLKISSKVDASLSEVDIPSIITKKLLKAAMKH
IEVIVKARQKVKNTEFLQQAALEEYGPELHVALRSRRDELHYLRKLTELLFPYILPPKATDCRSLTLLIREILSG
SVFLPSLDFLADPDTVNHLLIIFIDDSPPEKATEPASPLVPFLQKFAEPRNKKPSVLKLELKQIREQQDLLFRFM
NFLKQEGAVHVLQFCLTVEEFNDRILRPELSNDEMLSLHEELQKIYKTYCLDESIDKIRFDPFIVEEIQRIAEGP
YIDVVKLQTMRCLFEAYEHVLSLLENVFTPMFCHSDEYFRQLLRGAESPTRNSKLNRNTQKRGESFGISRIGSKI
KGVFKSTTMEGAMLPNYGVAEGEDDFIEEGIVVMEDDSPVEAVSTPNTPRNLAAWKISIPYVDFFEDPSSERKEK
KERIPVFCIDVERNDRRAVGHEPEHWSVYRRYLEFYVLESKLTEFHGAFPDAQLPSKRIIGPKNYEFLKSKREEF
QEYLQKLLQHPELSNSQLLADFLSPNGGETQFLDKILPDVNLGKIIKSVPGKLMKEKGQHLEPFIMNFINSCESP
KPKPSRPELTILSPTSENNKKLFNDLFKNNANRAENTERKQNQNYFMEVMTVEGVYDYLMYVGRVVFQVPDWLHH
LLMGTRILFKNTLEMYTDYYLQCKLEQLFQEHRLVSLITLLRDAIFCENTEPRSLQDKQKGAKQTFEEMMNYIPD
LLVKCIGEETKYESIRLLFDGLQQPVLNKQLTYVLLDIVIQELFPELNKVQKEVTSVTSWM

838/2682 FIGURE 770

GTGCGAGCCAGAAGGGGAAAGGCGGCCACTCGTGCCTGAGCGACCGCAGAGGGGAGTGGGAGCAGTGGGGTAAAG GAGCGGGGGGGGAATAAGAAAGGCCGAGAGAAGGCGGACAGAGGCTAGTGGTGGTGGTGGTAGGGGGAGA GAAGGGAAGGGGGGGTCACGCGGGGGGCGCGCGCGCACCGGGAGCGCGCTCGGAGGCGAGTGGAACTGGATCGG GTTTGCTGCCAGCGGCGTGAGCTTCGGCCGCCATTTTACAACAGCTCCACTCGCGCCGGACACAGGGAGCAGCGA GCACGCGTTTCCCGCAACCCGATACCATCGGACAGGATTTCTCCGCCTCAGCCCAACGGGGAGATCTCTGGAAAC ATCGCTACAGAACATGTTAATGGAAATGGTACTGAAGAGCCCATGGATACTACTTCTGCAGTTATCCATTCAGAA AATTTTCAGACATTGCTTGATGCTGGTTTACCACAGAAAGTTGCTGAAAAACTAGATGAAAATTTACGTTGCAGGG CTAGTTGCACATAGTGATTTAGATGAAAGAGCTATTGAAGCTTTAAAAGAATTCAATGAAGACGGTGCATTGGCA GTTCTTCAACAGTTTAAAGACAGTGATCTCTCTCATGTTCAGAACAAAAGTGCCTTTTTATGTGGAGTCATGAAG ACTTACAGGCAGAGAAAAAACAAGGGACCAAAGTAGCAGATTCTAGTAAAGGACCAGATGAGGCAAAAATTAAG GCACTCTTGGAAAGAACAGGCTACACACTTGATGTGACCACTGGACAGAGGAAGTATGGAGGACCACCTCCAGAT TCCGTTTATTCAGGTCAGCAGCCTTCTGTTGGCACTGAGATATTTGTGGGAAAGATCCCAAGAGATCTATTTGAG CTCAATAGAGGTTATGCGTTTGTCACTTTTTGTACAAAAGAAGCAGCTCAGGAGGCTGTTAAACTGTATAATAAT CATGAAATTCGTTCTGGAAAACATATTGGTGTCTGCATCTCAGTTGCCAACAATAGGCTTTTTGTGGGCTCTATT CCTAAGAGTAAAACCAAGGAACAGATTCTTGAAGAATTTAGCAAAGTAACAGAGGGTCTTACAGACGTCATTTTA TACCACCAACCGGATGACAAGAAAAAAAACAGGAGCTTTTGCTTTGAATATGAAGATCACAAAACAGCTGCC CAGGCAAGGCGTAGGTTAATGAGTGGTAAAGTCAAGGTCTGGGGGAATGTTGGAACTGTTGAATGGGCTGATCCT ATAGAAGATCCTGATCCTGAGGTTATGGCAAAGGTAAAAGTGCTGTTTGTACGCAACCTTGCCAATACTGTAACA GAAGAGATTTTAGAAAAGGCATTTAGTCAGTTTGGGAAACTGGÁACGAGTGAAGAAGTTAAAAGATTATGCGTTC CAAATGTATGACGATTACTACTATTATGGTCCACCTCATATGCCCCCTCCAACAAGAGGTCGAGGGCGTGGAGGT AGAGGTGGTTATGGATATCCTCCAGATTATTATGGATATGAAGATTATTATGATTATTATGGTTATGATTACCAT AACTATCGTGGTGGATATGAAGATCCATACTATGGTTATGAAGATTTTCAAGTTGGAGCTAGAGGAAGGGGTGGT AGAGGAGCAAGGGGTGCTCCATCCAGAGGTCGTGGGGCTGCTCCTCCCCGCGGTAGAGCCGGTTATTCACAG AGAGGAGGTCCTGGATCAGCAAGAGGCGTTCGAGGTGCGAGAGGGGGGTGCCCAACAACAAAGAGGCCGCGGGGTA AAGCGGCGCCAGACCAATAATCAGAACTGGGGCTCCCAACCCATTGCTCAGCAACCGCTCCAAGGTGGTGATCAT TCTGGTAACTATGGTTACAAATCTGAAAACCAGGAGTTTTATCAGGATACTTTTGGGCAACAGTGGAAG<u>TAG</u>AAA CAGTAGGGCCTCTGTAAAATTGGAGACTGATAGGTTGATCAGAAACTCACCCTAAATCTGAACGGGTGCCGCTAT AATTTGTGACATCTGGCAAGATTTCCCTTTATGTATATATTTTAACAATCCGCTTGGACACGAACAAAGCCACAC AGTTAATGAGTTTGCATTTGTGCTTGAGAAAATTTGGCTCAAGTCCATTTGGCTGTAGTGTCAACGATGTTTCCA GTAGTGTTTAGATTTGGTGTCTTCAAAGGTAGTTGATTAAAACCAAGTGTGTCTTTAATATCTTGTATCAGAATA ACTTTGTATGTTACCAACTTAAATTGCTAGAATAAGGTAAATTGATACACAACTGCTATTTTTAATTTAGAACTT TGACCTAATTTGGGTTTTCAAAACCATTTTGGCTACTTGTATTCTTTATGCTGTTGTTTATTTCAATAAAAAATT CACACCT

839/2682 FIGURE 771

840/2682 FIGURE 772

CTTTTTCTCCATCTCAGAACCTTCCTGCCGTCGCGTTTGCACCTCGCTGCTCCAGCCTCTGGGGCGCATTCCAAC ${\tt AATTAAATTTTAACC} \underline{\textbf{ATG}} {\tt AGGGGAAATCGTGCACATCCAGGCTGGTCAGTGTGGCAACCAGATCGGTGCCAAGTTCCAGGCTGGTGGCAACCAGATCGGTGCCAAGTTCCAGGCTGGTGGCAACCAGATCGGTGCCAAGTTCCAGGCTGGTGGCAACCAGATCGGTGCCAAGTTCCAGGCTGGTGGCAACCAGATCGGTGCCAAGTTCCAGGTTGGCAACCAGATCGGTGCCAAGTTCCAGGCTGGTGGCAACCAGATCGGTGCCAAGTTCCAGGTTGGCAACCAGATCGGTGCCAAGTTCCAGGTTGGCAACCAGATCGGTGCCAAGTTCCAGGTTGGCAACCAGATCGGTGCCAAGTTCCAGGTTGGCAACCAGATCGGTGCCAAGTTCCAGGTTGGCAACCAGATCGGTGCCAAGTTCCAGGTTGGCAACCAGATCGGTGCCAAGTTCCAGGTTGGCAACCAGATCGGTGCCAAGTTCCAGGTTGGCAACCAGATCGGTGCCAAGTTCCAGGTTGGCAACCAGATCGGTGCCAAGTTCCAGGTTGTGAACCAGATCGGTGCCAAGTTCCAGGTTGTGAACCAGATCGGTGCCAAGTTCCAGGTTGAACCAGATCGGTGCCAAGTTCCAGGTTGAACCAGATCGGTGCCAAGTTCCAGGTTGAACCAAGTTCAGATCGGTGCCAAGTTCCAGGTTGAACCAAGTTCAGATCAGATCAGATCGGTGCAAAGTTCAGAT$ TGGGAGGTGATCAGTGATGAACATGGCATCGACCCCACCGGCACCTACCACGGGGACAGCGACCTGCAGCTGGAC CGCATCTCTGTGTACTACAATGAAGCCACAGGTGGCAAATATGTTCCTCGTGCCATCCTGGTGGATCTAGAACCT GGGACCATGGACTCTGTTCGCTCAGGTCCTTTTGGCCAGATCTTTAGACCAGACAACTTTGTATTTGGTCAGTCT GGGGCAGGTAACAACTGGGCCAAAGGCCACTACACAGAGGGCGCCGAGCTGGTTGATTCTGTCCTGGATGTGGTA GGAATGGGCACTCTCCTTATCAGCAAGATCCGAGAAGAATACCCTGATCGCATCATGAATACCTTCAGTGTGGTG CCTTCACCCAAAGTGTCTGACACCGTGGTCGAGCCCTACAATGCCACCCTCTCCGTCCATCAGTTGGTAGAGAAT ACTGATGAGACCTATTGCATTGACAACGAGGCCCTCTATGATATCTGCTTCCGCACTCTGAAGCTGACCACCA ACCTACGGGGATCTGAACCACCTTGTCTCAGCCACCATGAGTGGTGTCACCACCTGCCTCCGTTTCCCTGGCCAG $\verb|CTCAATGCTGACCTCCGCAAGTTGGCAGTCAACATGGTCCCCTTCCCACGTCTCCATTTCTTTATGCCTGGCTTT|\\$ GCCCCTCTCACCAGCCGTGGAAGCCAGCAGTATCGAGCTCTCACAGTGCCGGAACTCACCCAGCAGGTCTTCGAT GCCAAGGACATGATGGCTGCCTGTGACCCCCGCCACGGCCGATACCTCACCGTGGCTGCTGTCTTCCGTGGTCGG ATGTCCATGAAGGAGGTCGATGAGCAGATGCTTAACGTGCAGAACAAGAACAGCAGCTACTTTGTGGAATGGATC CCCAACAATGTCAAGACAGCCGTCTGTGACATCCCACCTCGTGGCCTCAAGATGGCAGTCACCTTCATTGGCAAT AGCACAGCCATCCAGGAGCTCTTCAAGCGCATCTCGGAGCAGTTCACTGCCATGTTCCGCCGGAAGGCCTTCCTC CACTGGTACACAGGCGAGGCATGGACGAGATGGAGTTCACCGAGGCTGAGAGCAACATGAACGACCTCGTCTCT ${\tt GAGTATCAGCAGTACCAGGATGCCACCGCAGAAGAGGAGGAGGAGTTTCGGTGAGGAGGCCGAAGAGGAGGCC}{{\tt TAA}}$

841/2682 FIGURE 773

MREIVHIQAGQCGNQIGAKFWEVISDEHGIDPTGTYHGDSDLQLDRISVYYNEATGGKYVPRAILVDLEPGTMDS VRSGPFGQIFRPDNFVFGQSGAGNNWAKGHYTEGAELVDSVLDVVRKEAESCDCLQGFQLTHSLGGGTGSGMGTL LISKIREEYPDRIMNTFSVVPSPKVSDTVVEPYNATLSVHQLVENTDETYCIDNEALYDICFRTLKLTTPTYGDL NHLVSATMSGVTTCLRFPGQLNADLRKLAVNMVPFPRLHFFMPGFAPLTSRGSQQYRALTVPELTQQVFDAKDMM AACDPRHGRYLTVAAVFRGRMSMKEVDEQMLNVQNKNSSYFVEWIPNNVKTAVCDIPPRGLKMAVTFIGNSTAIQ ELFKRISEQFTAMFRRKAFLHWYTGEGMDEMEFTEAESNMNDLVSEYQQYQDATAEEEEDFGEEAEEEA

842/2682 FIGURE 774

TTCTCTCTTCGTTGCTGAGCGACAAGCTTCCTAGCGCT<u>ATG</u>ACTGTCGTCTCCGTCCCGCAGCGGAGCCGCTCG TCCTGGGTGGCCGCCTTGCCCCGTTGCCTTTCCTCCCGAGGTTACTTTGGGGCCCTCCCGATGGTGACCACGG GAGATGGCCCGTGTCTGACCCCCCAGCCTCGCGCTCCAGCAGCTCTGCCCAACCGCAGCCTCGCCGTGGCGGGAG GCACTCCTCGGGCAGCGCCGAAGAAGCGGCGAAAGAAGAAGGTGCGGGCCAGCCCCGCAGGGCAGCTGCCCAGCC GCTTCCACCAGTACCAGCAGCACCGGCCGAGTCTGGAGGGCGGCCGGAGCCCCGCGACCGGCCCGAGCGGAGCGC ACCTTGCCCCGCTGCGGCCCGCGGCTCCCGGCCAAACCCCCCTCAGGAAAGAGGTTTTAAAATCAAAGATGGGAA AATCGGAGAAAATTGCCCTTCCCCATGGCCAGCTTGTTCATGGTATACACTTGTATGAGCAACCAAAGATAAACA GACAGAAAAGCAAATATAACTTGCCACTAACCAAGATCACCTCTGCAAAAAGAAATGAAAACAACTTTTGGCAGG ATTCTGTTTCATCTGACAGAATTCAGAAGCAGGAAAAAAAGCCTTTTAAAAATACCGAGAACATTAAAAATTCGC ATTTGAAGAAATCAGCATTTCTAACTGAAGTGAGCCAAAAGGAAAATTATGCTGGGGCAAAGTTTAGTGATCCAC ${\tt AGCTGATGGCAGTACACTTAAAAACCCTCCTCAAAGTTCAAACT{\tt TAG}{\tt ATTTCAGATTTCAGTATGTGTGTAAAACC}$ ATAATTTTTCCCATATCCCTGGACTCTTGAGAAAATTGGTACAGAAATGGAAATTTGCCTTGTTGCAACATACAA TTGCAAAAGATGAGTTTAAAAAATTACATACAAACAGCTTGTATTATATTTTATATTTTGTAAATACTGTATACC CCACATTGCAGGTGTTTTGTATATATACAATGGATAAATTTTAAGTGTGTGCTAAGGCACATGGAAGACCGATTT TATTTGCACAAGGTACTGAGATTTTTTTCAAGAAACAGCTGTCAAATCTCAAGGTGAAGATCTAAATGTGAACAG TTGTAATCTGAAATTACTGAACAACTCCTATTCCCATTTTTGCTAAACTCAATTTCTGGTTTTTGGTATATATCCA CCCCCCTTTTAAAATAGTCTTGACTCTTTGTGTGTGACTGTTTCTCATGTTTGAATGTGTGACTAGGAGATGATT TTGTGTGGTTGGATTTTTTTGACTTCTACTTTACTGGCTGAGTGTGAGCCGCCATGCCTGGCCATAATCTACATT TTCTTACCAGGAGCAGCATTGAGGTTTTTGAGCATAGTACTTGACTACTCTAGAGGCTGAGACGGGAGCATCTCT TGAGCCTGAGAAGTGGAGATTGCAATTGAGCTAGGATCAGGCCACTGCACTCCAGCCTGGGTAACAGACGCTGTC TCAAAAAAAGGCCAAGAGAAAGTAAGGGAGACAGA

843/2682 FIGURE 775

 ${\tt MTVVSVPQREPLVLGGRLAPLGFSSRGYFGALPMVTTAPPPLPRIPDPRALPPTLFLPHFLGGDGPCLTPQPRAPAALPNRSLAVAGGTPRAAPKKRRKKVRASPAGQLPSRFHQYQQHRPSLEGGRSPATGPSGAQEVPGPAAALAPS PAAAAGTEGASPDLAPLRPAAPGQTPLRKEVLKSKMGKSEKIALPHGQLVHGIHLYEQPKINRQKSKYNLPLTKI TSAKRNENNFWQDSVSSDRIQKQEKKPFKNTENIKNSHLKKSAFLTEVSQKENYAGAKFSDPPSPSVLPKPPSHW MGSTVENSNQNRELMAVHLKTLLKVQT$

844/2682 FIGURE 776

CCGCTCCGCGAGGGGTGCGCAGCATTCGGCAGAGGGCGCTTCGACGGGCTGGGCTGTGCGCCTGCGCAGTGTGGG TCGCTCCCGATTCCCTGCCCCGGCCGGCCCCGCCTCGGCTCCGCCCCCGCTCTCAGCCGCCCCTCTGC $\verb|CCCGCAGCCAGCCCGCTGTCCGGCAGT| \textbf{ATC} \verb|TTCAGCTGGGTCAGCAAGGATGCCCGCCGCAAGAAGGAGCCG| \\$ GAGCTCTTCCAGACGGTGGCCGAGGGGCTGCGGCAGCTGTACGCGCAGAAGCTGCTACCCCTGGAGGAGCACTAC CGCTTCCACGAGTTCCACTCGCCCGCRCTGGAGGACGCTGACTTCGACAACAAGCCTATGGTGCTCCTCGTGRGG CAGTACAGCACGGGCAAGACCACCTTCATCCGACACCTGATCGAGCAGGACTTCCCGGGGATGCGCATCGGGCCC GAGCCCACCACCGACTCCTTCATCGCCGTCATGCACGGCCCCACTGAGGGCGTGGTGCCGGGCAACGCGCTGGTG GTGGACCCGCGGCGCCCCTTCCGCAAGCTCAACGCGTTTGGCAACGCTTTCCTCAACAGGTTCATGTGTGCCCAG CTGCCCAACCCCGTCCTGGACAGCATCAGCATCATCGACACCCCCGGGATCCTGTCTGGAGAGAAGCAGCGGATC AGCAGAGGCTATGACTTTGCAGCCGTCCTGGAGTGGTTCGCGGAGCGTGTGGACCGCATCATCCTGCTCTTCGAC GCCCACAAGCTGGACATCTCCGATGAGTTCTCGGAAGTGATCAAGGCTCTGAAGAACCATGAGGACAAGATCCGC GTGGTGCTGAACAAGGCAGACCAGATCGAGACGCAGCAGCTGATGCGGGTGTACGGGGCCCTCATGTGGTCCCTG GGCAAGATCATCAACACCCCCGAGGTGGTCAGGGTCTACATCGGCTCCTTCTGGTCCCACCCGCTCCTCATCCCC GACAACCGCAAGCTCTTTGAGGCCGAGGAGCAGGACCTCTTCAAGGACATCCAGTCACTGCCCCGAAACGCCGCC CTCAGGAAGCTCAATGACCTGATCAAGCGGGCACGGCTGGCCAAGGTTCACGCCTACATCATCAGCTCCCTCAAG AAAGAGATGCCCAATGTCTTTGGTAAAGAGAGCAAAAAGAGAGCTGGTGAACAACCTGGGAGAGATCTACCAG AAGATTGAGCGCGAGCACCAGATCTCCCCTGGGGACTTCCCGAGCCTCCGCAAGATGCAGGAACTCCTGCAGACC CAGGACTTCAGCAAGTTCCAGGCGCTGAAGCCCAAGCTGCTGGACACGGTGGATGACATGCTGGCCAACGACATC GGCACCATGAACGGGCCGTTCGGGCACGGCTACGGCGAGGGGGCCGGCGAGGGCATCCACGACGTGGAGTGGGTG GTGGGCAAGGACAAGCCCACCTACGACGAGATCTTCTACACGCTGTCCCCTGTCAACGGCAAGATCACGGGCGCC AACGCCAAGAAGGAGATGGTGAAGTCCAAGCTCCCCAACACCGTGCTAGGGAAGATCTGGAAGCTGGCCGACGTG GACAAGGACGGGCTGCTGGACGACGAGGAGTTCGCGCTGGCCAACCACCTCATCAAGGTCAAGCTGGAGGGCCAC GAGCTGCCCGCCGACCTGCCCCCGCACCTGGTGCCGCCCTCCAAGCGCAGACATGAG<u>TGA</u>TGGCGCCCGGCCCCG GCGGGGGAGGCAGGGGTGAGAGGATGGAATTGTGTGCACAAGAACTGTGGCTATTTTAATATATAACGTTAGAGG CTGCGTTCTTTGTCGCCGCCTCCCCTGTGTGCCAGCCCTGTGTGCACGGCCTCTGCCCCCCGGCCTTGTGCTGTG GCTGGAGCTGGACAGTGCAGTGACTGCGACCGTGGGGGAGCCAGGTCGCCCTTTTGGCAGCTGAGGCTGAGGC $\tt CCGTGCGCGGGCCCTGCCCTTTCCTCCCGCGCCCCACCGGCTCCGACGCGCAACCCCGCTCAGCAGTCACAGAAG$ ${\tt CAGGGCCCAGCCACCTTGGTCTTTTTTTGGGAGTTCAGGGGGAGTAGGAGAATGTCTTCCAGAAAAATACATAAGC}$ TAGTTTCTGTTCTGTAAAGTGATATCTTTCATACTTGACCAAAGTTCCCAATAACTTCCCAACCACTGTTCAAAA GCTGTGATTTTTGTCTCCCCTTCCCACCCTCCAGCCAAGGAGCAGCCCTGCCCAGGGGAATTTAGGTGTGGGTAC CCGGGGAGCACCCCGTTCCTGGACCCCAGTGTTGCATTTCCTGGCTGAGGAAGGGTGGTCATCCCAGCTCCTGCC CTACCCTCTCACTTAACTGGAGCTTTGGGACGCACCCTCCACAGTGGGAGGTGGTGGTGGGGGTGGCGGTGGCGGG GCCTCACGACAGCTTGGTGCTGGTAAGAGGAAGCCCGTGGTTCTGGCTAGGCTCTCATGTCCAGACAGCGGGGAC GCAGCTCACTTGGATGTCCTTACAACGCCCCTGGCCCCAGGTTGAGCAATAAGAAACCAGAACCTTGCGGCCCAG TGGCCCGGGCCAGTTCAGGCCGCCTCCCCCCTCTTGCCTGGGGCCATTGAGCCCCAGCCTCCAGGGGCCCGGGT GCGTTTGCAAGCCAGTGGCCACTGTCCGGGCTGTGATGGCACCAAGGCAGGTGGAGCACCAGGTACCACACAGCT GGGCTTCCCACCAGGCTTTCCCGCGGGGGTCTCAGGGAGCTTCTCCCCAGCGCTGCTCGGAGTCTGCAGGAACTG TCACTGTTGAAGTTGCAGTGGCTTGTTCACACCTGTGGGAAGAGAGTGAAGACTTTCTCCTTGCATTAAAAAGT CTGAACTGTGAAAAAAAAAAAAAAAAAAAAAAAAAAAA

845/2682 FIGURE 777

MFSWVSKDARRKKEPELFQTVAEGLRQLYAQKLLPLEEHYRFHEFHSPALEDADFDNKPMVLLVXQYSTGKTTFI
RHLIEQDFPGMRIGPEPTTDSFIAVMHGPTEGVVPGNALVVDPRRPFRKLNAFGNAFLNRFMCAQLPNPVLDSIS
IIDTPGILSGEKQRISRGYDFAAVLEWFAERVDRIILLFDAHKLDISDEFSEVIKALKNHEDKIRVVLNKADQIE
TQQLMRVYGALMWSLGKIINTPEVVRVYIGSFWSHPLLIPDNRKLFEAEEQDLFKDIQSLPRNAALRKLNDLIKR
ARLAKVHAYIISSLKKEMPNVFGKESKKKELVNNLGEIYQKIEREHQISPGDFPSLRKMQELLQTQDFSKFQALK
PKLLDTVDDMLANDIARLMVMVRQEESLMPSQVVKGGAFDGTMNGPFGHGYGEGAGEGIHDVEWVVGKDKPTYDE
IFYTLSPVNGKITGANAKKEMVKSKLPNTVLGKIWKLADVDKDGLLDDEEFALANHLIKVKLEGHELPADLPPHL
VPPSKRRHE

846/2682 FIGURE 778

GTCATCTGGCCAGCCCCCCCCCCCCCCCCCCCAGGCCCCCAGAGGCCGCGCGGGCCCGGGCTTCGGCCGA TCAGCCCGGGAGGCCCCGCGCCCCCTTGGCCCGCGCCCCCTGGTCACAGTGGAAGAGGCGCCCGCGCTGCG CTGCCCGGAGGAGCCGTCGCGCCCCCTTCCTGTTCGGCTGGTTCCTGCCAGCTCGAGGACAAACACGCGTGC GCGCGGCGGCGAGCGCCTCGCCCCCCCAGCCGCCGGCGCGCAGTCCGCCTTTTTCCGGAGCAGACTGG CCGCGGTGCTAGTCGGTAGCAGCGGCCGCCGCAGCGGCTCCGCACTGGCGAACCGAGGGCAGAAAAAGGCGGGGT TGACGGCTTTTTGGTAGGAGTGGGCTGGACCGGACGCCAGAGACAAAGGCTCCCAAGGCAAGAGGGACTGTGGCC CTGCGTCGGCTCTGCTCGGAACTGCTGACCCCAGGAATTTACGCCCCTTCGTTTTTCTCTTCTGATTCTTCTCTT CTCCCAAGCCCGCGTCCCCTCACGCGTGGCCTCTCTCCTTGCCGGGAGGGCCGCGA<u>ATC</u>GAGGTCCCGCCCAGGCT TTCCCATGTGCCGCCGCTTGTTCCCCTCCGCTCCGCTACTTTAGCCTCCCGCAGCCTCTCCCATTGGCGGCC GCGGCCGCCGCAGCTAGCCCCGCTCCTCCCTTCGCTCCCAGCTCCGCCCGGCAGGGGGCGCCGGGC CCCGGATCTCTTCCGCCGCCATTTTAAATCCAGCTCCATACAACGCTCCGCCGCCGCTGCTGCCGCGACCCGGAC ${\tt TGCGCGCCAGCACCCCCTGCCGACAGCTCCGTCACTATGGAGGATATGAACGAGTACAGCAATATAGAGGAATT}$ CGCAGAGGGATCCAAGATCAACGCGAGCAAGAATCAGCAGGATGACGGTAAAATGTTTATTGGAGGCTTGAGCTG GGATACAAGCAAAAAAGATCTGACAGAGTACTTGTCTCGATTTGGGGAAGTTGTAGACTGCACAATTAAAACAGA TCCAGTCACTGGGAGATCAAGAGGATTTGGATTTGTGCTTTTCAAAGATGCTGCTAGTGTTGATAAGGTTTTGGA ACTGAAAGAACACAAACTGGATGGCAAATTGATAGATCCCAAAAGGGCCAAAGCTTTAAAAGGGAAAGAACCTCC CAAAAAGGTTTTTGTGGGTGGATTGAGCCCGGATACTTCTGAAGAACAAATTAAAGAATATTTTTGGAGCCTTTGG AGAGATTGAAAATATTGAACTTCCCATGGATACAAAAACAAATGAAAGAAGAGGGATTTTGTTTTATCACATATAC TGATGAAGAGCCAGTAAAAAAATTGTTAGAAAGCAGATACCATCAAATTGGTTCTGGGAAGTGTGAAATCAAAGT TGCACAACCCAAAGAGGTATATAGGCAGCAACAACAACAAAAAAGGTGGAAGAGGTGCTGCAGCTGGTGGACG AGGTGGTACGAGGGTCGTGGCCGAGGTCAGGGCCAAAACTGGAACCAAGGATTTAATAACTATTATGATCAAGG ATATGGAAATTACAATAGTGCCTATGGTGGTGATCAAAACTATAGTGGCTATGGCGGATATGATTATACTGGGTA TAACTATGGGAACTATGGACATGGACAGGGATATGCAGACTACAGTGGCCAACAGAGCACTTATGGCAAGGCATC TCGAGGGGGTGGCAATCACCAAAACAATTACCAGCCATAC<u>TAAA</u>AGGAGAACATTGGAGAAAACAGGAGGAGATGT TAAAGTAACCCATCTTGCAGGACGACATTGAAGATTGGTCTTCTGTTGATCTAAGATGATTATTTTTGTAAAAGAC TTTCTAGTGTACAAGACACCATTGTGTCCAACTGTATATAGCTGCCAATTAGTTTTCTTTGTTTTACTTTGTCC TTTGCTATCTGTTATGACTCAATGTGGATTTGTTTATACACATTTTATTTGTATCATTTCATGTTAAACCTCA AATAAATGCTTCCTTATGTGATTGCTTTTCTGCGTCAGGTACTACATAGCTCTGTAAAAAATGTAATTTAAAATA AGCAATAATTAAGGCACAGTTGATTTTGTAGAGTATTGGTCCATACAGAGAAACTGTGGTCCTTTATAAATAGCC AGCCAGCGTCACCCTCTTCTCCAATTTGTAGGTGTATTTTATGCTCTTAAGGCTTCATCTTCTCCCTGTAACTGA GATTTCTACCACACCTTTGAACAATGTTCTTTCCCTTCTGGTTATCTGAAGACTGTCCTGAAAGGAAGACATAAG TGTTGTGATTAGTAGAAGCTTTGTAATCATAACACAATGAGTAATTCTTGTATAAAAGGTTCAGATACAAAAGGAG CACTGTAAAACTGGTAGGAGCTATGGTTTAAGAGCATTGGAAGTAGTTACAACTCAAGGATTTTGGTAGAAAGGT ATGAGTTTGGTCGAAAAATTAAAATAGTGGCAAAATAAGATTTAGTTGTGTTTTCTCAGAGCCGCCACAAGATTG AACAAAATGTTTTCTGTTTGGGCATCCTGAGGAAGTTGTATTAGCTGTTAATGCTCTGTGAGTTTAGAGAAAAGT CTTGATAGTAAATCTAGTTTTTGACACAGTGCATGAACTAAGTAGTTAAATATTTACATATTCAGAAAGGAATAG TGGAAAAGGTATCTTGGTTATGACAAAGTCATTACAAATGTGACTAAGTCATTACAAATGTGACTGAGTCATTAC AGTGGACCCTCTGGGTGCATTGAAAAGAATCCGTTTTATATCCAGGTTTCAGAGGACCTGGAATAATAATAAGCT TTGGATTTTGCATTCAGTGTAGTTGGATTTTGGGACCTTGGCCTCAGTGTTATTTACTGGGATTGGCATACGTGT TCACAGGCAGAGTAGTTGATCTCACACAACGGGTGATCTCACAAAACTGGTAAGTTTCTTATGCTCATGAGCCCT CCCTTTTTTTTTTAATTTGGTGCCTGCAACTTTCTTAACAATGATTCTACTTCCTGGGCTATCACATTATAATG CTCTTGGCCTCTTTTTTGCTGCTGTTTTGCTATTCTTAAACTTAGGCCAAGTACCAATGTTGGCTGTTAGAAGGG ATTCTGTTCATTCAACATGCAACTTTAGGGAATGGAAGTTAAGTTCATTTTTAAGTTGTGGTCAGTAGGTGCGG TGTCTAGGGTAGTGAATCCTGTAAGTTCAAATTTATGATTAGGTGACGAGTTGACATTGAGATTGTCCTTTTCCC CTGATCAAAAAAATGAATAAAGCCTTTTTAAACG

WO 2004/039956 PCT/US2003/034381 ·

847/2682 FIGURE 779

MEVPPRLSHVPPPLFPSAPATLASRSLSHWRPRPPRQLAPLLPSLAPSSARQGARRAQRHVTAQQPSRLAGGAAI KGGRRRRPDLFRRHFKSSSIQRSAAAAAATRTARQHPPADSSVTMEDMNEYSNIEEFAEGSKINASKNQQDDGKM FIGGLSWDTSKKDLTEYLSRFGEVVDCTIKTDPVTGRSRGFGFVLFKDAASVDKVLELKEHKLDGKLIDPKRAKA LKGKEPPKKVFVGGLSPDTSEEQIKEYFGAFGEIENIELPMDTKTNERRGFCFITYTDEEPVKKLLESRYHQIGS GKCEIKVAQPKEVYRQQQQQQKGGRGAAAGGRGGTRGRGRGQGQNWNQGFNNYYDQGYGNYNSAYGGDQNYSGYG GYDYTGYNYGNYGYGQGYADYSGQQSTYGKASRGGGNHQNNYQPY

848/2682 FIGURE 780

GCTGTACGACATCCTGGGCGTCCCGCCCGGCGCCAGCGAGAACGAGCTGAAGAAGGCATACAGAAAGTTAGCCAA GGAATATCATCCTGATAAGAATCCAAATGCAGGAGACAAATTTAAAGAAATAAGTTTTGCATATGAAGTACTATC CATGGATGATATTTTCTCTCACATTTTTGGTGGGGGATTGTTCGGCTTCATGGGCAATCAGAGTAGAAGTCGAAA TGGCAGAAGAAGAGAGAGACATGATGCATCCACTCAAAGTATCTTTAGAAGATCTGTATAATGGCAAGACAAC GTGTAGTGCTTGTCGAGGTCGAGGTGTGCGCATCATGATCAGACAGCTGGCTCCAGGGATGGTACAACAGATGCA GAAGGTGATTAAAGAAGTCAAGATTCTTGAAGTCCACGTAGACAAAGGCATGAAACATGGACAGAGAATTACATT GGTATTTCAGAGAGATGGGAATGATTTGCACATGACATATAAAATAGGACTTGTTGAAGCTCTATGTGGATTTCA GTTCACATTTAAGCACCTTGATGGACGTCAGATTGTGGTGAAATACCCCCCTGGCAAAGTAATTGAACCAGGGTG TGTTCGTGTAGTTCGAGGTGAAGGGATGCCGCAGTATCGTAATCCCTTTGAAAAAGGTGATCTTTACATAAAGTT TGATGTGCAGTTTCCTGAAAACAACTGGATCAACCCAGACAAGCTTTCTGAACTAGAAGATCTTCTGCCATCTAG ACCGGAAGTTCCTAACATAATTGGAGAAACAGAGGAGGTAGAGCTTCAGGAATTTGATAGCACTCGAGGCTCAGG AGGTGGTCAGAGGCGTGAAGCCTATAATGATAGCTCTGATGAAGAAAGCAGCAGCCATCATGGACCTGGAGTGCA $\tt GTGTGCCCATCAG{\color{red}{\bf TAA}} ACTCTGCAAACAAATTGCACAGGTGGATTTCTTTCCACATTTGCCTGATTTGTTCTCACATTTGTTCTCACATTTGCCTGATTTGTTCTCACATTTGTTCTCACATTTGCCTGATTTGTTCTCACATTTGTTCTCACATTTGTTCTCACATTTGTTCTCACATTTGTTCTCACATTTGTTCTCACATTTGTTCTCACATTTGTTCTCACATTTGTTCTCACATTTGTTCACATTTTCACATTTTTCACATTTTCACATTTTCACATTTTCACATTTTCACATTTTCACATTTTCACATTTTCACATTTTCACATTTTCACATTTTCACATTTTCACATTTTCACATTTTCACATTTTCACATTTCACATTTTCACATTTCACATTTTCACATTTCACATTTCACATTTTCACATTTCACATTTCACATTTTCACATTTCACATTTCACATTTCACATTTCACATTTCACATTTCACATTTCACATTTCACATTTCACATTTCACATTTCACATTTCACATTTCACATTTCACATTTCACATTTCACATTTCACATTACATTTCACATATTTCACATTACATTCACATTACATTCACATTTCACATTTCACATTTCACATTTCACATTTCACATTTCACATT$ GCAATCCAGCTGGAGTGTCTTATCAATCCCAGATGAACTGAGGGACATCTGTTGGTCTATGTATAACTTTTAAAA TTGGTATAGTATCTACAGAGTGTATAATTTAAACTAACCACAAAGCTTTACATCTTCATTTTGACTGTTCCATAG CAAAATAAAGCACTTGAAAGGAAACAAAACTCCCTTTCACACATGGATTATTATAAGTTTCAATCCTGGTATCTG TGCTTGATTTTTATCAGTTTTGTGTAAATTTTTATGTTTCATATTTTAAATTTAAATCCCACATTGTAAAGTTTG TACAATTTGTCCTGAAGCTTTGTGTTTGGCTGCACCTGCATAAGCTGCTACAAATAAAATAAAAAATTCATAGC CTGTATCTATCATTTAAATGCATGGAAAAAAATGGGCTTTGCACACAATGGGTTTGGAGCTGACTGGGAACAATG

849/2682 FIGURE 781

MANVADTKLYDILGVPPGASENELKKAYRKLAKEYHPDKNPNAGDKFKEISFAYEVLSNPEKRELYDRYGEQGLR EGSGGGGGMDDIFSHIFGGGLFGFMGNQSRSRNGRRRGEDMMHPLKVSLEDLYNGKTTKLQLSKNVLCSACSGQG GKSGAVQKCSACRGRGVRIMIRQLAPGMVQQMQSVCSDCNGEGEVINEKDRCKKCEGKKVIKEVKILEVHVDKGM KHGQRITFTGEADQAPGVEPGDIVLLLQEKEHEVFQRDGNDLHMTYKIGLVEALCGFQFTFKHLDGRQIVVKYPP GKVIEPGCVRVVRGEGMPQYRNPFEKGDLYIKFDVQFPENNWINPDKLSELEDLLPSRPEVPNIIGETEEVELQE FDSTRGSGGGQRREAYNDSSDEESSSHHGPGVQCAHQ

850/2682 FIGURE 782

CTCTGAGGAGAAGCAGCAAACATTTGCTAGTCAGACAAGTGACAGGGAAATGCAAACAGCAGCAGTGTGTA AAGCTAAATGATGGCCACTTCATGCCTGTATTGGGATTTGGCACCTATGCACCTCCAGAGGTTCCGAGAAGTAAA GCTTTGGAGGTCACAAAATTAGCAATAGAAGCTGGGTTCCGCCATATAGATTCTGCTCATTTATACAATAATGAG GAGCAGGTTGGACTGGCCATCCGAAGCAAGATTGCAGATGGCAGTGTGAAGAGAAGACATATTCTACACTTCA AAGCTTTGGTCCACTTTTCATCGACCAGAGTTGGTCCGACCAGCCTTGGAAAAACTCACTGAAAAAAGCTCAATTG GACTATGTTGACCTCTATCTTATTCATTCTCCAATGTCTCTAAAGCCAGGTGAGGAACTTTCACCAACAGATGAA AATGGAAAAGTAATATTTGACATAGTGGATCTCTGTACCACCTGGGAGGCCATGGAGAAGTGTAAGGATGCAGGA TACAAGCCTGTCTGCAACCAGGTAGAATGTCATCCGTATTTCAACCGGAGTAAATTGCTAGATTTCTGCAAGTCG AAAGATATTGTTCTGGTTGCCTATAGTGCTCTGGGATCTCAACGAGACAAACGATGGGTGGACCCGAACTCCCCG GTGCTCTTGGAGGACCCAGTCCTTTGTGCCTTGGCAAAAAAGCACAAGCGAACCCCAGCCCTGATTGCCCTGCGC TTTGAGTTCCAGTTGACTGCAGAGGACATGAAAGCCATAGATGGCCTAGACAGAAATCTCCACTATTTTAACAGT ${\tt GATAGTTTTGCTAGCCACCCTAATTATCCATATTCAGATGAATAT} {\tt TAAC} {\tt CATGGAGAGCTTTGCCTGATGTCTACC}$ AGAAGCCCTGTGTGTGGATGGTGACGCAGAGGACGTCTCTATGCCGGTGACTGGACATATCACCTCTACTTAAAT CCGTCCTGTTTAGCGACTTCAGTCAACTACAGCTGAGTCCATAGGCCAGAAAGACAATAAATTTTTATCATTTTG AAAT

851/2682 FIGURE 783

MDSKQQCVKLNDGHFMPVLGFGTYAPPEVPRSKALEVTKLAIEAGFRHIDSAHLYNNEEQVGLAIRSKIADGSVK REDIFYTSKLWSTFHRPELVRPALENSLKKAQLDYVDLYLIHSPMSLKPGEELSPTDENGKVIFDIVDLCTTWEA MEKCKDAGLAKSIGVSNFNRRQLEMILNKPGLKYKPVCNQVECHPYFNRSKLLDFCKSKDIVLVAYSALGSQRDK RWVDPNSPVLLEDPVLCALAKKHKRTPALIALRYQLQRGVVVLAKSYNEQRIRQNVQVFEFQLTAEDMKAIDGLD RNLHYFNSDSFASHPNYPYSDEY

852/2682 FIGURE 784

GCATCTGCGCAGGCGCCCGGCTCCTAAGTCTACCCAGGAACTGACCCTGCTCTCTCCTTTCCCTGTTAGAC**ATG**G GCACTCCACAGAAGGATGTTATTATCAAGTCAGATGCACCGGACACTTTGTTATTGGAGAAACATGCAGATTATA TCGCATCCTATGGCTCAAAGAAAGATGATTATGAATACTGTATGTCTGAGTATTTGAGAATGAGTGGCATCTATT GGGGTCTGACAGTAATGGATCTCATGGGACAACTTCATCGCATGAATAGAGAAGAGATTCTGGCATTTATTAAGT CTTGCCAACATGAATGTGGTGGAATAAGTGCTAGTATCGGACATGATCCTCATCTTTTATACACTCTTAGTGCTG AGAAAGAAGATGGTTCTTTTGCTGGAGATATTTGGGGAGAAATTGACACAAGATTCTCTTTTTTGTGCGGTGGCAA CTTTGGCTTTGTTGGGAAGCTTGATGCTATTAATGTGGAAAAGGCAATCGAATTTGTTTTATCCTGTATGAACT TTGACGGTGGATTTGGTTGCAGACCAGGTTCTGAATCCCATGCTGGGCAGATCTATTGTTGCACAGGATTTCTGG CTATTACAAGTCAGTTGCATCAAGTAAATTCTGATTTACTTGGCTGGTGGCTTTGTGAACGACAATTACCCTCAG GCGGGCTCAATGGAAGGCCGGAGAAGTTACCAGATGTATGCTACTCATGGTGGGTCCTGGCTTCCCTAAAGATAA TTGGAAGACTTCATTGGATTGATAGAGAGAAACTGCGTAATTTCATTTTAGCATGTCAAGATGAAGAAACGGGGG GATTTGCAGACAGGCCAGGAGATATGGTGGATCCTTTTCATACCTTATTTGGAATTGCTGGATTGTCACTTTTGG GAGAAGAACAGATTAAACCTGTTAATCCTGTCTTTTGCATGCCTGAAGAAGTGCTTCAGAGAGTGAATGTTCAGC $\texttt{CTGAGCTAGTGAGC} \underline{\textbf{TAG}} \texttt{ATTCATTGAATTGAAAGTTGCATAGTATAGTTTTGCCATTTTAACATTTCTGTATTTG}$ TAATTATACATATTGTAAAATAAAGACCGGTATTTTATTTTCTGCTTTTTATTCTGAAGTCCTGTTATTCTGACT ACAGTTCTTTGTGTATACTTCTGTGTCTGTTATGTTCAATAACTGAGCTAACATAAAATAACTCTAGGTTTCTAC TTGATTTTTCCCCCATGTATACCTTTCATCTGTTCTATAGCAAGTTGATGTAAATTGGTTTGTCAACAAGAATGT **AAAAAAAAAAAAAAAAAAAAAAAAAA**

853/2682 FIGURE 785

MGTPQKDVIIKSDAPDTLLLEKHADYIASYGSKKDDYEYCMSEYLRMSGIYWGLTVMDLMGQLHRMNREEILAFI KSCQHECGGISASIGHDPHLLYTLSAVQILTLYDSINVIDVNKVVEYVKGLQKEDGSFAGDIWGEIDTRFSFCAV ATLALLGKLDAINVEKAIEFVLSCMNFDGGFGCRPGSESHAGQIYCCTGFLAITSQLHQVNSDLLGWWLCERQLP SGGLNGRPEKLPDVCYSWWVLASLKIIGRLHWIDREKLRNFILACQDEETGGFADRPGDMVDPFHTLFGIAGLSL LGEEQIKPVNPVFCMPEEVLQRVNVQPELVS

854/2682 FIGURE **786A**

CGGCGCGGAACCCCGAGCGCCCGGGCGCACCCCGGCTTCCCGGAGCGCGACGCGGCGGCAGCAGCCCCGGTGCGG AGGAGCCCCAGAGCGCGGAGGGCGCGCCGAGCGGTGCTGGCCCCCGGGGCTCCCCGGACCTTCCCCAC AACCACAGCGTGCGCAAGTGCGGCTACCTGCGCAACGAAGAGCATGGCCACAAGCGCTTCTTCGTGCTGCGCGGA AGCGAGAAAAAGTGGCGGAGCAAGGCAGGCGCCCGAAACGGGTGATCGCTCTCGACTGCTGCCTGAACATCAAC AAGCGCGCCGACGCCAAGCACAAGTACCTGATCGCCCTCTACACCAAGGACGAGTACTTCGCCGTGGCCGCCGAG AACGAGCAGGAGCAGGAGGGCTGGTACCGCGCGCTCACCGACCTGGTCAGCGAGGGCCGCGGGCCGCCGGAGAC GCGCCCCCGCGCCGCCGCCGCGCGTCCTGCAGCGCCTCCCTGCCCGGCGCCCCTGGGCGGCTCTGCCGGCGCCC GCCGGGGCCGAGGACAGCTACGGGCTGGTGGCTCCCGCCACGGCCGCCTACCGTGAGGTGTGGCAGGTGAACCTG AAGCCCAAGGGTCTGGGCCAGAGCAAGAACCTGACGGGGGTGTACCGTCTGTGCCTGTCTGCGCGCACCATCGGC TTCGTGAAGCTCAACTGCGAGCAGCCGTCGGTGACGCTGCAGCTCATGAACATCCGCCGCTGCGGCCACTCGGAC AGCTTCTTCTTCATCGAGGTGGGCCGCTCGGCCGTCACAGGCCCCGGCGAGCTGTGGATGCAGGCGGACGACTCG GTGGTGGCGCAGAACATCCACGAGACCATCCTGGAGGCCATGAAGGCGCTCAAGGAGCTCTTCGAGTTCCGGCCG CTGGTCAACCTGCCCCCAGCCAGACGGGCCTGGTGCGCCGCTCGCGCACCGACAGCCTGGCCGCCACCCCGCCG GCGGCGCAGAGGCTGGTGTCGGTGGCTGGGAGCCCCTGAGCCCCGGGCCGGTGCGCGCCCCCTGAGCCGCTCG AGCCGCTCCATGTCCATGCCCGTGGCGCACTCGCCGCCGCCGCCACCAGCCCCGGCTCCCTGTCGTCCAGCAGC GGCCAGCGGCCCTCCAGCGGCAGCGCCTCCGCCTCGGGCTCCCCCAGCGACCCCGGCTTCATGTCCCTGGACGAG TACGGCTCCAGCCCAGGCGACCTGCGCGCCTTCTGCAGCCACCGAAGCAACACGCCCGAGTCCATCGCGGAGACG CCCCGGCCCGAGACGGCGGCGGCGGCGGTGAGTTCTACGGGTACATGACCATGGACAGGCCCCTGAGCCACTGT GGCCGCTCCTACCGCCGGGTCTCGGGGGACGCGGCCCAGGACCTGGACCGAGGGCTGCGCAAGAGGACCTACTCC CTGACCACGCCAGCCCGGCAGCCGGTGCCCCAGCCCTCCTCTGCCTCGCTGGATGAATACACCCTGATGCGG GCCACCTTCTCGGGCAGCGCGGGCCGCCTCTGCCCGTCCTGCCCGCGTCCTCTCCCAAGGTGGCCTACCACCCC TACCCAGAGGACTACGGAGACATCGAGATCGGCTCCCACAGGAGCTCCAGCAGCAACCTGGGGGCAGACGACGGC TACATGCCCATGACGCCCGGCGCGCCTTCGCGGGCAGTGGGAGCGACGACGACGACGACTACATGCCC ATGAGCCCCGCCAGCGTGTCCGCCCCCAAGCAGATCTTGCAGCCCAGGGCCGCCGCCGCCGCCGCCGCCGTG AAGGCCAGCTCGCCCGCGAGAGCTCCCCCGAGGACAGTGGGTACATGCGCATGTGGTGCGGTTCCAAGCTGTCC ATGGAGCATGCAGATGGCAAGCTGCCCAACGGGGACTACCTCAACGTGTCCCCCAGCGACGCGGTCACCACG GGCACCCGCCCGACTTCTTCTCCGCAGCCCTGCACCCCGGCGGGGAGCCGCTCAGGGGCGTTCCCGGCTGCTGC TACAGCTCCTTGCCCCGCTCCTACAAGGCCCCCTACACCTGTGGCGGGGACAGCGACCAGTACGTGCTCATGAGC GGTTTCTTGGGCCAGCGCGGCCGGGCGGTGAGGCCCACGCGCCTGTCCCTGGAGGGGCTGCCCAGCCTGCCCAGC ATGCACGAGTACCCACTGCCACCGGAGCCCAAGAGCCCCGGCGAGTACATCAACATCGACTTTGGCGAGCCCGGG CCGGCCTCGTCGCTGGGCTCAGGCACCCCGGGCACCAGCAGCGGCAGCGGCAGCGGTCTCCGCTCTCCGACTAC ATGAACCTCGACTTCAGCTCCCCAAGTCTCCTAAGCCGGGCGCCCCGAGCGGCCACCCCGTGGGCTCCTTGGAC

855/2682 FIGURE 786B

CTGCAGCCGCCGCCGCCGCCGCCCCGGGGGGAGCTGTACCGCCTGCCCCCGCCTCGGCCGTTGCCACCGCC $\tt CAGGGCCCGGGCGCCTCATCGTTGTCCTCGGACACCGGGGACAATGGTGACTACACCGAGATGGCTTTTGGT$ GTGGCCGCCACCCCGCCGCAACCTATCGCGGCCCCCCGAAGCCAGAAGCTGCCCGCGTGGCCAGCCCGACGTCG GGCGTGAAGAGGCTGAGCCTCATGGAGCAGGTGTCGGGAGTCGAGGCCTTCCTGCAGGCCAGCCCAGCCCCGGAC CCCCACCGCGGCGCCAAGGTCATCCGCGCAGACCCGCAGGGGGGCCGCCGCCGCCACAGTTCCGAGACCTTCTCC TCCACCACGACGGTCACCCCGTGTCCCCGTCCTTCGCCCACACCCCAAGCGCCACAACTCGGCCTCCGTGGAA CCACGACAGTTGCAGCCGGCGCCCCTTTGGCACCGCAGGGCCGGGGTGGACCCCGGGTCAGCCCGGGGGCTTG GTCGGTTGTCCTGGGAGCGGTGGATCGCCCATGCGCAGAGAGACCTCTGCCGGCTTCCAGAATGGTCTCAACTAC ATCGCCATCGACGTGAGGGAGGAGCCCGGGCTGCCACCCAGCCGCAGCCGCCGCCGCCGCCGCCTTCCTCAGCCG GGAGACAAGAGCTCCTGGGGCCGGACCCGAAGCCTCGGGGGTCTCATCAGCGCTGTGGGCGTCGGCAGCACCGGC GGCGGGTGCGGGGGCCGGGTCCCGGTGCCCTGCCCACACCTACGCCAGCATTGACTTCTTGTCCCAC ATATCATTAAAAGAAGACGCTCAGCGCTGTTTCAGCCCGAAGCTGCTTGCAGTTTTCTTTTGGATCTGAGCAATG ACTGTGTTTGGAAACATCTGTGGACTCTGATAGATGGGGCACAACAAGGCAAGGTCACCTGCCTCTTTCCCTTGT TCCCGGATGGGCATTCATCATTGTGCTGTTTTGCTTTTGTTTTTGTTTTAACAAAATTAGCTGAAGAAGTT ATTTACTGGCTTACACTCAAAACGACCACAGTCCTACCTCAGTTCAAGGTAAAGCCGGATTTCCGTGGCGGGGGT CCACAGGACCTCCTGTAGTAGCCCCTGCGCTGTGTGTGTCTGGAGCGCGTCCTCGCCTTATTTAAATGGTCCAGTAG ACAGCTGCTTGTTGGATTCCAGTGCAGGTACCTGCGATGTTTACGTCCACACCGAGCCCAGTGTGGGACTGACAT TTCTCAATGGAAGTGAAATTTGGGATTGGACTTTGAAGACGATTACTAAATAATTATTATATATGTAACTGAAG CTCTTTTTACCTTTAACAGACTTGTTTAATCTTCTCGATGTAGATGTTTATGTAGGTACTTCACATTGCAAACGC CTTTTATTCTATTTACAAGCTCAGATGTCTCTGCTCTCCTGAATCTTGGGCATGCCTTTCTGTAACCAAAAATCC CTGTAGGCGTGCTAGCAATTCCAGGGTGGTCCGGGTTTGGCAGATTTGATTTTTAAAAAATGTATTATCTTTAAT AAGAAACTGATAAAAAGAGGCATCCAGCCCCTATGTTATTGATGGAAAAAGAAAAAGAAAAAGCAATCTCGCA GTACATGTTACTTGTCGAAAAAATTCCGGACAAGACTACCCTTGTTTTATGTTTTCAGTATTCTGAAAATACCAG TGTGTGGCAGTTCTCGCAGATGTTACCTAAAACTGCTGAACTTGACCGGCAGAATGTTCTGCCGTTTTCTGCTCC CTCGACACTTGATTGGAGGGCTGTCGACCTCTCCCCGTGGGGGCTTCCCCAGTGCCTATCTTCTCTGATAGTC TAAATATATAATAGATATCTATCGCTATAGAATAATGCATTAATAAAATGAGGCTTTTTTAGAGGAAGACCAAAA **AATTCAATGTCTTAAAAATATATTTAATGGCAATGCAAAAGTCTTCCTGCTTCCGTGCTGAACTTTAGAACAGAG** GATTGTATTGCAAGACAAGTTGAATGTAAAGTGATCTCCCTGAACATTTTTAAGGTTTTACTTTTCTGAAATTA TACATCACAGCAGTGCATAGGCCATATAATGTTAGCTGGAAGGTCAATTTCAGTGTATGATATACTTTATTAAGA CCCAGGTACGATAGGGACTGAATATGGACCCTGCTGAAAGCAGTGTATTGACGCATATTTAACTCGCCCTCTATC CGTAGAGTAGTCATGACACTATACAGATGGTTCGTGTTCATACTGCAGCTTAAAACAAGCAAAATACACAGATGA TAATATGCTAAATTTTCCTCTATCCTGTACATTTCACAAAAAGGCATATGCAATATTTACATTTTAATTTAGTT TACAGAATGGAACCAAAATGTATAAATGTTATGTTTGCTAAAACTTCACAATGTATATTGGGTCTTTGTACATTT TGCCTGACTTACCTTAAATTTAAAATATTTTTTGCTATATAAACTTTAACAGTTATTAAACAGTGTTTTCCTTTT GGGTACGTATTGTTTCTGGATATCAAGATGTTAAATATTTTCTTGCTATTGTGATATGACAAGAGACTTAACTT ATCTTGCTCTGTCTTCCACTGTACACGCTGTATATAGGGGTCAATGTGATGCTGCTGGAGACGAGAATAAACTGG ACTAGAATAGTGCATTGTATTTAGTCTGTATTGATCATGGATGCCCTCCTTAATAGCCATATGCAATAAAATAAA GTACATTATTTATGAAATGAA

856/2682 FIGURE 787

MASPPRHGPPGPASGDGPNLNNNNNNNNHSVRKCGYLRNEEHGHKRFFVLRGPGAGGDEATAGGGSAPOPPRLE YYESEKKWRSKAGAPKRVIALDCCLNINKRADAKHKYLIALYTKDEYFAVAAENEQEQEGWYRALTDLVSEGRAA AGDAPPAAAPAASCSASLPGALGGSAGAAGAEDSYGLVAPATAAYREVWQVNLKPKGLGQSKNLTGVYRLCLSAR TIGFVKLNCEQPSVTLQLMNIRRCGHSDSFFFIEVGRSAVTGPGELWMQADDSVVAQNIHETILEAMKALKELFE FRPRSKSQSSGSSATHPISVPGARRHHLVNLPPSQTGLVRRSRTDSLAATPPAAKCSSCRVRTASEGDGGRAAG AAAAAQRLVSVAGSPLSPGPVRAPLSRSHTLSGGCGGRGSKVALLPAGGALQHSRSMSMPVAHSPPAATSPGSLS SSSGHGSGSYPPPPGPHPPLPHPLHHGPGORPSSGSASASGSPSDPGFMSLDEYGSSPGDLRAFCSHRSNTPESI AETPPARDGGGGGEFYGYMTMDRPLSHCGRSYRRVSGDAAQDLDRGLRKRTYSLTTPARQRPVPQPSSASLDEYT LMRATFSGSAGRLCPSCPASSPKVAYHPYPEDYGDIEIGSHRSSSSNLGADDGYMPMTPGAAFAGSGSGSCRSDD YMPMSPASVSAPKQILQPRAAAAAAAAVPSAGPAGPAPTSAAGRTFPASGGGYKASSPAESSPEDSGYMRMWCGS KLSMEHADGKLLPNGDYLNVSPSDAVTTGTPPDFFSAALHPGGEPLRGVPGCCYSSLPRSYKAPYTCGGDSDOYV LMSSPVGRILEEERLEPQATPGPSQAASAFGAGPTQPPHPVVPSPVRRSGRRSGFLGQRGRAVRPTRLSLEGLPS LPSMHEYPLPPEPKSPGEYINIDFGEPGARLSPPAPPLLASAASSSSLLSASSPASSLGSGTPGTSSDSRORSPL SDYMNLDFSSPKSPKPGAPSGHPVGSLDGLLSPEASSPYPPLPPRPSASPSSSLQPPPPPPAPGELYRLPPASAV ATAQGPGAASSLSSDTGDNGDYTEMAFGVAATPPQPIAAPPKPEAARVASPTSGVKRLSLMEOVSGVEAFLOASO PPDPHRGAKVIRADPQGGRRRHSSETFSSTTTVTPVSPSFAHNPKRHNSASVENVSLRKSSEGGVGVGPGGGDEP PTSPRQLQPAPPLAPQGRPWTPGQPGGLVGCPGSGGSPMRRETSAGFQNGLNYIAIDVREEPGLPPOPOPPPPPL PQPGDKSSWGRTRSLGGLISAVGVGSTGGGCGGPGPGALPPANTYASIDFLSHHLKEATIVKE

857/2682 FIGURE 788A

GGGGTGGCACGAGCCCGCGGCCGGAGTGCGAGGCGGAGGCGAGGAGGCCGCGGGGACGGAGGCCGAGGCCGGCCG GGCCCCGAAGCCATGGAGAACGCGCACACCAAGACGGTGGAGGAGGTGCTGGGCCACTTCGGCGTCAACGAGAG TACGGGGCTGAGCCTGGAACAGGTCAAGAAGCTTAAGGAGAGATGGGGCTCCAACGAGTTACCGGCTGAAGAAGG ${\tt AAAAACCTTGCTGGAACTTGTGATTGAGCAGTTTGAAGACTTGCTAGTTAGGATTTTATTACTGGCAGCATGTAT}$ ATCTTTTGTTTTGGCTTGGTTTGAAGAAGGTGAAGAACAATTACAGCCTTTGTAGAACCTTTTGTAATTTTACT TCCTGGTGATATTGTAGAAATTGCTGTTGGTGACAAAGTTCCTGCTGATATAAGGTTAACTTCCATCAAATCTAC CACACTAAGAGTTGACCAGTCAATTCTCACAGGTGAATCTGTCTCTGTCATCAAGCACACTGATCCCGTCCCTGA CCCACGAGCTGTCAACCAAGATAAAAAGAACATGCTGTTTTCTGGTACAAACATTGCTGCTGGGAAAGCTATGGG AGTGGTGGTAGCAACTGGAGTTAACACCGAAATTGGCAAGATCCGGGATGAAATGGTGGCAACAGAACAGGAGAG AACACCCCTTCAGCAAAAACTAGATGAATTTGGGGAACAGCTTTCCAAAGTCATCTCCCTTATTTGCATTGCAGT CTGGATCATAAATATTGGGCACTTCAATGACCCGGTTCATGGAGGGTCCTGGATCAGAGGTGCTATTTACTACTT TGGAACTCGCAGAATGGCAAAGAAAAATGCCATTGTTCGAAGCCTCCCGTCTGTGGAAACCCTTGGTTGTACTTC TGTTATCTGCTCAGACAAGACTGGTACACTTACAACAAACCAGATGTCAGTCTGCAGGATGTTCATTCTGGACAG AGTGGAAGGTGATACTTGTTCCCTTAATGAGTTTACCATAACTGGATCAACTTATGCACCTATTGGAGAAGTGCA TAAAGATGATAAACCAGTGAATTGTCACCAGTATGATGGTCTGGTAGAATTAGCAACAATTTGTGCTCTTTGTAA TGACTCTGCTTTGGATTACAATGAGGCAAAGGGTGTGTATGAAAAAGTTGGAGAAGCTACAGAGACTGCTCTCAC TTGCCTAGTAGAGAAGATGAATGTATTTGATACCGAATTGAAGGGTCTTTCTAAAATAGAACGTGCAAATGCCTG CAACTCAGTCATTAAACAGCTGATGAAAAAGGAATTCACTCTAGAGTTTTCACGTGACAGAAAGTCAATGTCGGT TTACTGTACACCAAATAAACCAAGCAGGACATCAATGAGCAAGATGTTTGTGAAGGGTGCTCCTGAAGGTGTCAT TGACAGGTGCACCCACATTCGAGTTGGAAGTACTAAGGTTCCTATGACCTCTGGAGTCAAACAGAAGATCATGTC TGTCATTCGAGAGTGGGGTAGTGGCAGCGACACACTGCGATGCCTGGCCCTGGCCACTCATGACAACCCACTGAG AAGAGAAGAAATGCACCTTGAGGACTCTGCCAACTTTATTAAATATGAGACCAATCTGACCTTCGTTGGCTGCGT GGGCATGCTGGATCCTCCGAGAATCGAGGTGGCCTCCTCCGTGAAGCTGTGCCGGCAAGCAGGCATCCGGGTCAT CATGATCACTGGGGACAACAAGGGCACTGCTGTGGCCATCTGTCGCCGCATCGGCATCTTCGGGCAGGATGAGGA CGCCCGCTGTTTTGCTCGAGTTGAACCCTCCCACAAGTCTAAAATCGTAGAATTTCTTCAGTCTTTTGATGAGAT TACAGCTATGACTGGCGATGGCGTGAACGATGCTCCTGCTCTGAAGAAAGCCGAGATTGGCATTGCTATGGGCTC TGGCACTGCGGTGGCTAAAACCGCCTCTGAGATGGTCCTGGCGGATGACAACTTCTCCACCATTGTGGCTGCCGT $\tt TGAGGAGGGGGGGAATCTACAACAACATGAAACAGTTCATCCGCTACCTCATCTCGTCCAACGTCGGGGAAGT$ TGTCTGTATTTTCCTGACAGCAGCCCTTGGATTTCCCGAGGCTTTGATTCCTGTTCAGCTGCTCTGGGTCAATCT GGTGACAGATGGCCTGCCTGCCACTGCGCTTCAACCCTCCTGATCTGGACATCATGAATAAACCTCCCCG GAACCCAAAGGAACCATTGATCAGCGGGTGGCTCTTTTTCCGTTACTTGGCTATTGGCTGTTACGTCGGCGCTGC TACCGTGGGTGCTGCATGGTGGTTCATTGCTGCTGACGGTGGTCCAAGAGTGTCCTTCTACCAGCTGAGTCA TTTCCTACAGTGTAAAGAGGACAACCCGGACTTGAAGGCGTGGATTGTGCAATCTTTGAATCCCCATACCCGAT GACAATGGCGCTCTCTGTTCTAGTAACTATAGAAATGTGTAACGCCCTCAACAGCTTGTCCGAAAACCAGTCCTT GCTGAGGATGCCCCCTGGGAGAACATCTGGCTCGTGGGCTCCATCTGCCTGTCCATGTCATCCACTTCCTGAT CCTCTATGTCGAACCCTTGCCACTCATCTTCCAGATCACACCGCTGAACGTGACCCAGTGGCTGATGGTGCTGAA AATCTCCTTGCCCGTGATTCTCATGGATGAGACGCTCAAGTTTGTGGCCCGCAACTACCTGGAACCTGGTAAAGA GTGTGTGCAGCCTGCCACAAATCCTGCTCGTTCTCGGCATGCACCGATGGGATTTCCTGGCCGTTTGTGCTGCT TTTCACATGAACATACTGGCTGGTGATGGAGGTTTCATACTCTAGATTTTGTTTTTGCTTTTTCTGACTCCAGTGG GGCAAGATTTTCCTTTTTTATACACATAATTAAAGTGTCCATTGACATGTACAGAGAACTAACACTATTTTATGC

858/2682 FIGURE 788B

859/2682 FIGURE 789

MENAHTKTVEEVLGHFGVNESTGLSLEQVKKLKERWGSNELPAEEGKTLLELVIEQFEDLLVRILLLAACISFVL
AWFEEGEETITAFVEPFVILLILVANAIVGVWQERNAENAIEALKEYEPEMGKVYRQDRKSVQRIKAKDIVPGDI
VEIAVGDKVPADIRLTSIKSTTLRVDQSILTGESVSVIKHTDPVPDPRAVNQDKKNMLFSGTNIAAGKAMGVVVA
TGVNTEIGKIRDEMVATEQERTPLQQKLDEFGEQLSKVISLICIAVWIINIGHFNDPVHGGSWIRGAIYYFKIAV
ALAVAAIPEGLPAVITTCLALGTRRMAKKNAIVRSLPSVETLGCTSVICSDKTGTLTTNQMSVCRMFILDRVEGD
TCSLNEFTITGSTYAPIGEVHKDDKPVNCHQYDGLVELATICALCNDSALDYNEAKGVYEKVGEATETALTCLVE
KMNVFDTELKGLSKIERANACNSVIKQLMKKEFTLEFSRDRKSMSVYCTPNKPSRTSMSKMFVKGAPEGVIDRCT
HIRVGSTKVPMTSGVKQKIMSVIREWGSGSDTLRCLALATHDNPLRREEMHLEDSANFIKYETNLTFVGCVGMLD
PPRIEVASSVKLCRQAGIRVIMITGDNKGTAVAICRRIGIFGQDEDVTSKAFTGREFDELNPSAQRDACLNARCF
ARVEPSHKSKIVEFLQSFDEITAMTGDGVNDAPALKKAEIGIAMGSGTAVAKTASEMVLADDNFSTIVAAVEEGR
AIYNNMKQFIRYLISSNVGEVVCIFLTAALGFPEALIPVQLLWVNLVTDGLPATALGFNPPDLDIMNKPPRNPKE
PLISGWLFFRYLAIGCYVGAATVGAAAWWFIAADGGPRVSFYQLSHFLQCKEDNPDFEGVDCAIFESPYPMTMAL
SVLVTIEMCNALNSLSENQSLLRMPPWENIWLVGSICLSMSLHFLILYVEPLPLIFQITPLNVTQWLMVLKISLP
VILMDETLKFVARNYLEPGKECVQPATKSCSFSACTDGISWPFVLLIMPLVIWVYSTDTNFSDMFWS

860/2682 FIGURE 790

GGCACGAGGGCTGAGAAGAGTTTTGCACGTGGATCGCCGTTCGGGTGGGCGAG<u>ATG</u>GAGACAGCCCCCAAGCCGG CCGTTCCGACCACAGCCGGAGCCTCTCCAGGGCCTCCTCGTAACAAGAAGAATCGGGAGCTCCGTCCTCAGAGAC CAAAAAATGCTTACATCTTAAAGAAGTCTCGGATCTCTAAGAAGCCTCAGGTCCCGAAGAAACCCCGAGAATGGA AGAACCCGGAGTCCCAGCGCGGCTTGTCCGGGGCCCAAGATCCATTCCCAGGCCCCGCCCCCGTCCCTGTGGAAG TGGTCCAGAAGTTCTGTCGCATTGACAAATCCCGAAAGCTACCACATTCTAAAGCCAAAACTCGAAGCCGACTTG GGTTTCTGGAAGGGGAGGATGGGGAAGACACAGCAAAGATATGCCAGGCTGACATTGTGGAGGCTGTGGACATTG CAAGTGCAGCCAAGCACTTTGACTTGAATCTGCGGCAGTTTTGACCCTACAGACTAAACTACTCTCGAACTGGAA GACACCTGGCTTTTGGAGGGCGCCGAGGTCATGTGGCTGCCCTTGATTGGGTAACAAAGAAGCTTATGTGCGAGA GGCTCCACATCTATGACAATCAGGGCATTGAGCTCCACTGTATCCGCCGCTGTGACCGAGTAACACGGCTTGAGT AGATTGTGGCAGCTCTGAATGCTCGAGCTGGGCGCTCGATGTTATGAGTCAGAACCCTTACAATGCCGTCATCC ATCTCGGACACAGCAATGGTACTGTGTCTTTATGGAGTCCAGCTATGAAGGAGCCACTGGCAAAGATTCTCTGTC TGAAGATCTTTGACTTGCGAGGGACGTACCAGCCTCTGAGCACTCGGACCCTGCCCCATGGAGCAGGGCACCTGG CCTTCTCCCAGAGGGGACTGCTGGTGGCGGAATGGGTGACGTTGTCAACATCTGGGCAGGGCAGGGCAAGGCCA GCCCACCTCCCTTGAACAGCCCTACCTCACCCACCGGCTCTCAGGCCCTGTGCATGGCCTTCAGTTCTGCCCCT TTGAAGATGTGCTGGGGGTGGGGCACACTGGGGGGCATCACCAGCATGCTGGTCCCTGGGGCCGGTGAGCCCAACT TCGATGGCCTGGAGAGTAATCCATACAGAAGCCGGAAGCAGCGCCAGGAGTGGGAGGTGAAGGCCCTGCTAGAGA AGGTACCTGCAGAGCTTATTTGTCTGGACCCACGAGCCCTGGCCGAGGTGGATGTCATCTCCCTGGAGCAGGGAA AGAAGGAGCAGATAGAGAGGCTGGGCTATGACCCGCAGGCTAAGGCTCCCTTCCAGCCAAAGCCAAAGCAGAAGG GCCGCAGCTCCACGGCAAGCCTGGTGAAGAGGAAGAGGAAGGTCATGGATGAGGAACACAGGGACAAGGTCCGGC AGAGCCTTCAGCAGCAGCATCATAAGGAGGCGAAGGCCAAGCCCACGGGGGCCCGGCCATCTGCCCTGGACAGAT $\verb|TIGTGCGC| \textbf{TGA} \\ \texttt{GCCAGACTCCAGGGTTGCCTGGGAACAGTCTCCCCCAAGATCACCTGTAGGGAAATGAGTGTT|} \\$

861/2682 FIGURE **791**

METAPKPGKDVPPKKDKLQTKRKKPRRYWEEETVPTTAGASPGPPRNKKNRELRPQRPKNAYILKKSRISKKPQV PKKPREWKNPESQRGLSGAQDPFPGPAPVPVEVVQKFCRIDKSRKLPHSKAKTRSRLEVAEAEEEETSIKAARSE LLLAEEPGFLEGEDGEDTAKICQADIVEAVDIASAAKHFDLNLRQFGPYRLNYSRTGRHLAFGGRRGHVAALDWV TKKLMCEINVMEAVRDIRFLHSEALLAVAQNRWLHIYDNQGIELHCIRRCDRVTRLEFLPFHFLLATASETGFLT YLDVSVGKIVAALNARAGRLDVMSQNPYNAVIHLGHSNGTVSLWSPAMKEPLAKILCHRGGVRAVAVDSTGTYMA TSGLDHQLKIFDLRGTYQPLSTRTLPHGAGHLAFSQRGLLVAGMGDVVNIWAGQGKASPPSLEQPYLTHRLSGPV HGLQFCPFEDVLGVGHTGGITSMLVPGAGEPNFDGLESNPYRSRKQRQEWEVKALLEKVPAELICLDPRALAEVD VISLEQGKKEQIERLGYDPQAKAPFQPKPKQKGRSSTASLVKRKRKVMDEEHRDKVRQSLQQQHHKEAKAK&TGA RPSALDRFVR

862/2682 FIGURE 792

GAGCTAGCTTTGCAATATGCCGGCCGAGGCCGACCGCTTAAACGGCTGCTCGTGCCGATTCTTTTACCTGA GAAATGCTACGACCAACTTTTCGTTCAGTGGGACTTGCTTCACGTCCCCTGCCTCAAGATTCTCCTCAGCAAAGG CCTGGGGCTGGCCATTGTGGCTGGCTCACTTCTAGTAAAGCTGCCCCAGGTGTTTAAAATCCGGGGAGCCAAGAG TGCTGAAGGGTTGAGTCTCCAGTCTGTAATGCTGGAGCTAGTGGCATTGACTGGGACCATGGTCTACAGCATCAC TAACAACTTCCCATTCAGCTCTTGGGGTGAAGCCTTATTCCTGATGCTCCAGACGATCACCATCTGCTTCCTGGT CATGCACTACAGAGGACAGACTGTGAAAGGTGTCGCTTTCCTCGCTTGCTACGGCCTGGTCCTGCTGGTGCTTCT CTCACCTCTGACGCCCTTGACTGTAGTCACCCTGCTCCAGGCCTCCAATGTGCCTGCTGTGGTGGTGGGGAGGCT TCTCCAGGCAGCCACCAACTACCACAACGGGTACACAGGCCAGCTCTCAGCCATCACAGTCTTCCTGCTGTTTGG GGGCTCCCTGGCCCGAATCTTCACTTCCATTCAGGAAACCGGAGATCCCCTGATGGCTGGGACCTTTGTGGTCTC CTCTCTCTGCAACGGCCTCATCGCCGCCCAGCTGCTCTTCTACTGGAATGCAAAGCCTCCCCACAAGCAGAAAAA GGCGCAG<u>TAG</u>AGCCAGCTACTGGAGTCATTCCGTTTCCACTCATTCACCCAACCTCAGGGTTCTCCCCATCTGAG CCAGCCTGCTGGTGTGACTTACTCATCCTCCATTCCTCTGCACTTGCAGACTTTCTGAGCCAGGGTTTTCTTTTA GTGGAAACAATGGTTGATGGATCCAGATCCTTAGAAAAGGAGGATGGGGGTAGAGTCTCCCAAGCCAAAATT TTGACATTTGAGTGCTTTCGTAAGCCCTGTACATGTACTATTAATTCAGTCATTCAGCCAAGCCTCCTCTTAG TGGGGTGAGGAGGTTCCTGCTCTGGCAGGTCTAGGCGGAAGGGAGTGGAGATGGGGCTGGTTGCTGCTGCAGTGA

863/2682 FIGURE **793**

 $\label{thm:local} $$ $ $ \text{MAAEADGPLKRLLVPILIPEKCYDQLFVQWDLLHVPCLKILLSKGLGLGIVAGSLLVKLPQVFKIRGAKSAEGLS} $$ $ \text{LQSVMLELVALTGTMVYSITNNFPFSSWGEALFLMLQTITICFLVMHYRGQTVKGVAFLACYGLVLLVLLSPLTP} $$ $ \text{LTVVTLLQASNVPAVVVGRLLQAATNYHNGYTGQLSAITVFLLFGGSLARIFTSIQETGDPLMAGTFVVSSLCNG} $$ $ \text{LIAAQLLFYWNAKPPHKQKKAQ} $$$

864/2682 FIGURE **794**

GGTACGTGCGCTCGCGGTTCTCTCGCGGAGGTCGGCGGTGGCGGGAGCGCGGCTCCGGAGAGCCTGAGAGCACGGT ${\tt GGGGCGGGGGGAGAAAGTGGCCGCCGGAGGACGTTGGCGTTTACGTGTGGAAGAGCGGAAGAGTTTTGCTTT}$ TCGTGCGCGCCTTCGAAAACTGCCTGCCGCTGTCTGAGGAGTCCACCCGAAACCTCCCCTCCTCCGCCGGCAGCC AGGACGAGCCGGTGTTCGCGCAGCTCAAGCCGGTGCTGGGCCCCGCGAATCCGGCCCGCGACGCGGCGCTCTTCC CCGGCGAGGAGCTGAAGCACGCGCACCGCCCGCAGGCGCAGCCCGCGCGCAGGCCCGCAGCCGCAGCCGGCCC AGCCGCCGCCACCGGCCGCCGCCTCCAGAGGACCTGGTCCAGACAAGATGTGAAATGGAGAAGTATCTGA CACCTCAGCTTCCTCCAGTTCCTATAATTCCAGAGCATAAAAAGTATAGACGAGACAGTGCCTCAGTCGTAGACC AGTTCTTCACTGACACTGAAGGGTTACCTTACAGTATCAACATGAACGTCTTCCTCCCTGACATCACCTCACCTGA GAACTGGCCTCTACAAATCCCAGAGACCGTGCGTAACACACATCAAGACAGAACCTGTTGCCATTTTCAGCCACC AGACCGCAGCTCCAGAGGTGAACAATATTTTCATCAAACAAGAACTTCCTACACCAGATCTTCATCTTTCTGTCC CTACCCAGCAGGGCCACCTGTACCAGCTACTGAATACACCGGATCTAGATATGCCCAGTTCTACAAATCAGACAG AGACTGCAGTGAAACAATTCCAGGGCATGCCCCCTTGCACATACACAATGCCAAGTCAGTTTCTTCCACAACAGG CCACTTACTTTCCCCCGTCACCACCACGAGCTCAGAGCCTGGAAGTCCAGATAGACAAGCAGAGATGCTCCAGAATT TAACCCCACCTCCATCCTATGCTGCTACAATTGCTTCTAAACTGGCAATTCACAATCCAAATTTACCCACCACCC TGCCAGTTAACTCACAAAACATCCAACCTGTCAGATACAATAGAAGGAGTAACCCCGATTTGGAGAAACGACGCA TCCACTACTGCGATTACCCTGGTTGCACAAAAGTTTATACCAAGTCTTCTCATTTAAAAGCTCACCTGAGGACTC ACACTGGTGAAAAGCCATACAAGTGTACCTGGGAAGGCTGCGACTGGAGGTTCGCGCGATCGGATGAGCTGACCC GCCACTACCGGAAGCACACAGGCGCCAAGCCCTTCCAGTGCGGGGTGTGCAACCGCAGCTTCTCGCGCTCTGACC ACCTGGCCCTGCATATGAAGAGGCACCAGAAC<u>TGA</u>GCACTGCCCGTGTGACCCGTTCCAGGTCCCCTGGGCTCCC TGGAAATGTATATTTTGTATATTTGAGAAAACAGGGAATACATTGTATTAATACCAAAGTGTTTGGTCATTTTAA GAATCTGGAATGCTTGCTGTAATGTATATGGCTTTACTCAAGCAGATCTCATCTCATCTCATGACAGGCAGCCAG TCTCAACATGGGTAAGGGGTGGGGGTGAAGGGGAGTGTGTGCAGCGTTTTTACCTAGGCACCATCATTTAATGTG ACAGTGTTCAGTAAACAAATCAGTTGGCAGGCACCAGAAGAATGGATTGTATGTCAAGATTTTACTTGGCAT TGAGTAGTTTTTTCAATAGTAGGTAATTCCTTAGAGATACAGTATACCTGGCAATTCACAAATAGCCATTGAAC AAATGTGTGGGTTTTTAAAAATTATATACATATATGAGTTGCCTATATTTGCTATTCAAAAATTTTGTAAATATGC AAATCAGCTTTATAGGTTTATTACAAGTTTTTTAGGATTCTTTTGGGGAAGAGTCATAATTCTTTTGAAAATAAC CATGAATACACTTACAGTTAGGGATTTGTGGTAAGGTACCTCTCAACATTACCAAAATCATTTCTTTAGAGGGAAG GAATAATCATTCAAATGAACTTTAAAAAAGCAAATTTCATGCACTGATTAAAATAGGATTATTTTAAATACAAAA GGCATTTTATATGAATTATAAACTGAAGAGCTTAAAGATAGTTACAAAATACAAAAGTTCAACCTCTTACAATAA GCTAAACGCAATGTCATTTTTAAAAAGAAGGACTTAGGGGTCGTTTTCACATATGACAATGTTGCATTTATGATG CAGTTTTCAAGTACCAAAACGTTGAATTGATGCAGTTTTCATATATCGAGATGTTCGCTCGTGCAGTACTGT TGGTTAAATGACAATTTATGTGGATTTTGCATGTAATACACAGTGAGACACAGTAATTTTATCTAAATTACAGTG CAGTTTAGTTAATCTATTAATACTGACTCAGTGTCTGCCTTTAAATATAAATGATATGTTGAAAACTTAAGGAAG TTGCTCTTAAAAGATGTAAATAGATGACAAACGATGTAAATAATTTTGTAAGAGGCTTCAAAATGTTTATACGTG GAAACACACCTACATGAAAAGCAGAAATCGGTTGCTGTTTTTGCTTCTTTTTCCCTCTTATTTTTGTATTGTGGTC ATTTCCTATGCAAATAATGGAGCAAACAGCTGTATAGTTGTAGAATTTTTTGAGAGAATGAGATGTTTATATATT

865/2682 FIGURE 795

MATRVLSMSARLGPVPQPPAPQDEPVFAQLKPVLGAANPARDAALFPGEELKHAHHRPQAQPAPAQAPQPAQPPA TGPRLPPEDLVQTRCEMEKYLTPQLPPVPIIPEHKKYRRDSASVVDQFFTDTEGLPYSINMNVFLPDITHLRTGL YKSQRPCVTHIKTEPVAIFSHQSETTAPPPAPTQALPEFTSIFSSHQTAAPEVNNIFIKQELPTPDLHLSVPTQQ GHLYQLLNTPDLDMPSSTNQTAAMDTLNVSMSAAMAGLNTHTSAVPQTAVKQFQGMPPCTYTMPSQFLPQQATYF PPSPPSSEPGSPDRQAEMLQNLTPPPSYAATIASKLAIHNPNLPTTLPVNSQNIQPVRYNRRSNPDLEKRRIHYC DYPGCTKVYTKSSHLKAHLRTHTGEKPYKCTWEGCDWRFARSDELTRHYRKHTGAKPFQCGVCNRSFSRSDHLAL HMKRHQN

866/2682 FIGURE **796**

CGTTTTCCGCTCCTCGCTACGTCATCGTTGTGAGCCCGCTATCAGCGGCCAGCGCGGGCCGGGCCGGAGACCGTG GGGCCCCGGTTGCCGCCCCTCGGGAGCCACC<u>ATG</u>TTGGTGATACCCCCCGGACTGAGCGAGGAAGAGGAGGCT CTGCAGAAGAAATTCAACAAGCTCAAGAAAAAGAAAAAGGCATTGCTGGCTCTGAAGAAGCAAAGTAGCAGCAGC ACAACCAGCCAAGGTGTCAAACGCTCACTATCAGAGCAGCCTGTCATGGACACAGCCACAGCAACAGAGCAG GCAAAGCAGCTGGTGAAGTCAGGAGCCATCAGTGCCATCAAGGCTGAGACCAAGAACTCAGGCTTCAAGCGTTCT CGAACCCTTGAGGGGAAGTTAAAGGACCCCGAGAAGGGACCAGTCCCCACTTTCCAGCCGTTCCAGAGGAGCATA TCTGCTGATGATGACCTGCAAGAGTCATCCAGACGTCCCCAGAGGAAATCTCTGTATGAGAGCTTTGTGTCTTCT AGTGATCGACTTCGAGAACTAGGACCAGATGGAGAAGAGGGCAGAGGGCCCAGGGGCTGGTGATGGTCCCCCTCGA AGCTTTGACTGGGGCTATGAAGAACGCAGTGGTGCCCACTCCTCAGCCTCCCCCGAAGCCGCAGCCGGGAC CGCAGCCATGAGAGGAACCGGGACAGAGACCGAGATCGGGAGCGGGATCGAGACCGGGATCGAGACAGAGACAGA GAGCGGGACAGGGATCGGGATCGAGATCGAGACCGGGAACGGGACAGGGATCGGGATCGAGAC CGAGACCGAGAGGGTCCTTTCCGCAGGTCGGATTCATTCCCTGAACGGCGAGCCCCTAGGAAAGGGAATACTCTC tccatggacccacccagaaactgtgccttcgtcacctatgaaaagatggagtcagcagatcaggccgttgctgag * CTCAACGGGACCCAGGTGGAGTCTGTACAGCTCAAAGTCAACATAGCCCGAAAACAGCCCATGCTGGATGCCGCT ACTGGCAAGTCTGTCTGGGGCTCCCTCGCTGTCCAGAACAGCCCTAAGGGTTGCCACCGGGACAAGAGGACCCAG ATTGTCTACAGTGATGACGTCTACAAGGAAAACCTTGTGGATGGCTTCTACGGAACAGAGCTGGATTCCTTGTGC CTCATATGCCCCAATGCTGGTCTCAGTAAAACACTGAGGTGGAAGCTTACACATCTCCCTCAGCCTCTGGTTTTT CAGCACTTGGGATTGGGGTTAAGCCTTTAAAAACGGCTGTCAGGTTTGATCTCAGTGTAACGACATGGCCAGTGC CTGTTCCCCACTCCCTTGCCCCAAAAGGATCTGGAACAC

867/2682 FIGURE **797**

868/2682 FIGURE 798

TGACCGGGGACCGAGCATTTCAGATCTGCTCGGTAGACCTGGTGCACCACCACCATGTTGGCTGCAAGGCTGGTG TGTCTCCGGACACTACCTTCTAGGGTTTTCCACCCAGCTTTCACCAAGGCCTCCCCTGTTGTGAAGAATTCCATC ACGAAGAATCAATGGCTGTTAACACCTAGCAGGGAATATGCCACCAAAACAAGAATTGGGATCCGGCGTGGGAGA ACTGGCCAAGAACTCAAAGAGGCAGCATTGGAACCATCGATGGAAAAAATATTTAAAATTGATCAGATGGGAAGA TGGTTTGTTGCTGGAGGGGCTGCTGTTGGTCTTGGAGCATTGTGCTACTATGGCTTGGGACTGTCTAATGAGATT GGGAGTATTGGTTTAACAGCTTTGTCTGCCATAGCAATCAGCAGAACGCCTGTTCTCATGAACTTCATGATGAGA GGCTCTTGGGTGACAATTGGTGTGACCTTTGCAGCCATGGTTGGAGCTGGAATGCTGGTACGATCAATACCATAT GACCAGAGCCCAGGCCCAAAGCATCTTGCTTGGTTGCTACATTCTGGTGTGATGGGTGCAGTGGTGGCTCCTCTG ACAATATTAGGGGGTCCTCTCTCATCAGAGCTGCATGGTACACAGCTGGCATTGTGGGAGGCCTCTCCACTGTG GCCATGTGTGCGCCCAGTGAAAAGTTTCTGAACATGGGTGCACCCCTGGGAGTGGGCCTGGGTCTCGTCTTTGTG TCCTCATTGGGATCTATGTTTCTTCCACCTACCACCGTGGCTGGTGCCACTCTTTACTCAGTGGCAATGTACGGT GGATTAGTTCTTTTCAGCATGTTCCTTCTGTATGATACCCAGAAAGTATCAAGCGTGCAGAAGTATCACCAATGT ATGGAGTTCAAAAATATGATCCCATTAACTCGATGCTGAGTATCTACATGGATACATTAAATATATTTATGCGAG TTGCAACTATGCTGGCAACTGGAGGCAACAGAAAGAAATGAAGTGACTCAGCTTCTGGCTTCTCTGCTACATCAA ATATCTTGTTTAATGGGGCAGATATGCATTAAATAGTTTGTACAAGCAGCTTTCGTTGAAGTTTAGAAGATAAGA AACATGTCATCATATTTAAATGTTCCGGTAATGTGATGCCTCAGGTCTGCCTTTTTTTCTGGAGAATAAATGCAG ${\tt TAATCCTCTCCCAAATAAGCACACACTTTTCAATTCTCATGTTTGAGTGATTTTAAAATGTTTTGGTGAATGTGTTTTGGTGAATGTGTTTTGGTGAATGTGTTTTGGTGAATGTGTTTTGGTGAATGTGTTTTGGTGAATGTGTTTTGGTGAATGTGTGTGAATGTGTTTTGGTGAATGTGTGTGAATGTGTGTGAATGTGTGTGAATGTGTGTGAATGTGTGTGAATGTGTGTGAATGTGTGTGAATGTGTGTGAATGTGTGTGAATGTGTGTGAATGTGTGTGAATGTGTGTGAATGTGTGTGAATGTGTGTGAATGTGTGTGAATGTGTGTGAATGTGAATGTGTGAATGTGAATGTGTGAATGAAATGAATGAATGAAT$ AAAACTAAAGTTTGTGTCATGAGAATGTAAGTCTTTTTTCTACTTTAAAATTTAGTAGGTTCACTGAGTAACTAA TTTGGTAAAGGGACCAGAGAAGGAGTCACCTGCAGTCTTTTGTTTTTTAAATACTTAGAACTTAGCACTTGT GTTATTGATTAGTGAGGAGCCAGTAAGAAACATCTGGGTATTTGGAAACAAGTGGTCATTGTTACATTCATCTGC TGAACTTAACAAAACTGTTCATCCTGAAACAGGCACAGGTGATGCATTCTCCTGCTGTTGCTTCTCAGTGCTCTC TTTCCAATATAGATGTGGTCATGTTTGACTTGTACAGAATGTTAATCATACAGAGAATCCTTGATGGAATTATAT ATGTGTGTTTTACTTTTGAATGTTACAAAAGGAAATAACTTTAAAACTATTCTCAAGAGAAAATATTCAAAGCAT GAAATATGTTGCTTTTTCCAGAATACAAACAGTATACTCATGAATTGCTAAGTGTTTTTTTATTTTTTGCATATTT ATTGAACTGTCTAATTGAATACAGCTTGCTCTTGTCACCTCTTCAAGCTTTCAAGCCTTTATAGAAAAGCTTCTT TGTGGCTTACACTGGAAATTATGAAAGCAGTTTTTCTCCTAAGACTTTTGGTTTCTCGCATTGCCTCTCAGACTA AGCACTAAAAAGCAAAGCAAAACAGAACTAGTTCTGTCTTAATGAAATATATCAACCCAAAAGTGTAATGAGGAA AATGCTTCATTAGTTTCCCCTAGCAGACTTTTACTTCTCTTACACTGCTACACCATTACTTTCTTGAGACATTTG TAAGTCCTTTGATACAGAAGAGTTATATTTAGGAGGCTTTAATGAAGGG

869/2682 FIGURE **799**

MLAARLVCLRTLPSRVFHPAFTKASPVVKNSITKNQWLLTPSREYATKTRIGIRRGRTGQELKEAALEPSMEKIF KIDQMGRWFVAGGAAVGLGALCYYGLGLSNEIGAIEKAVIWPQYVKDRIHSTYMYLAGSIGLTALSAIAISRTPV LMNFMMRGSWVTIGVTFAAMVGAGMLVRSIPYDQSPGPKHLAWLLHSGVMGAVVAPLTILGGPLLIRAAWYTAGI VGGLSTVAMCAPSEKFLNMGAPLGVGLGLVFVSSLGSMFLPPTTVAGATLYSVAMYGGLVLFSMFLLYDTQKVSS VQKYHQCMEFKNMIPLTRC

870/2682 FIGURE 800

ATCCGTGAGTGCATCTCCATCCACGTTGGCCAGGCTGGTGTCCAGATTGGCAATGCCTGCTGGGAGCTCTACTGC CTGGAACACGGCATCCAGCCCGATGGCCAGATGCCAAGTGACAAGACCATTGGGGGAGGAGATGATTCCTTCAAC ACCTTCTTCAGTGAAACGGGTGCTGGCAAGCATGTGCCCCGGGCAGTGTTTGTAGACTTGGAACCCACAGTCATT GATGAAGTTCGCACTGGCACTTACCGCCAGCTCTTCCACCCTGAGCAACTCATCACAGGCAAGGAAGATGCTGCC AATAACTATGCCCGAGGGCACTACACCATTGGCAAGGAGATCATTGACCTCGTGTTGGACCGAATTCGCAAGCTG GCTGACCAGTGCACCGGTCTTCAGGGCTTCTTGGTTTTCCACAGCTTTGGTGGGGGAACTGGTTCTGGGTTCACC TCGCTGCTCATGGAACGTCTCTCAGTTGATTATGGCAAGAAGTCCAAGCTGGAGTTCTCCATTTACCCGGCGCCCC GCCTTCATGGTAGACAATGAGGCCATCTATGACATCTGTCGTAGAAACCTCGATATCGAGCGCCCAACCTACACT AACCTTAACCGCCTTATTAGCCAGATTGTGTCCTCCATCACTGCTTCCCTGAGATTTGATGGAGCCCTGAATGTT GACCTGACAGAATTCCAGACCAACCTGGTGCCCTACCCCCGCATCCACTTCCCTCTGGCCACATATGCCCCTGTC CAGATGGTGAAATGTGACCCTCGCCATGGTAAATACATGGCTTGCTGCCTGTTATACCGTGGTGACGTGGTTCCC AAAGATGTCAATGCTGCCATTGCCACCATCAAAACCAAGCGTACCATCCAGTTTGTGGATTGGTGCCCCACTGGC TTCAAGGTTGGCATTAATTACCAGCCTCCCACTGTGGTGCCTGGCGGAGACCTGGCCAAGGTACAGAGAGCTGTG TGCATGCTGAGCAATACCACAGCTGTTGCCGAGGCCTGGGCTCGCCTGGACCACAAGTTTGACCTGATGTATGCC AAGCGTGCCTTTGTTCACTGGTACGTGGGTGAGGGGATGGAGGAAGGCGAGTTTTCAGAGGCCCGTGAGGACATG GCTGCCCTTGAGAAGGATTATGAGGAGGTTGGAGCAGATAGTGCTGACGGAGAGGATGAGGGTGAAGAGTAT<u>TAA</u>

871/2682 FIGURE 801

MRECISIHVGQAGVQIGNACWELYCLEHGIQPDGQMPSDKTIGGGDDSFNTFFSETGAGKHVPRAVFVDLEPTVI
DEVRTGTYRQLFHPEQLITGKEDAANNYARGHYTIGKEIIDLVLDRIRKLADQCTGLQGFLVFHSFGGGTGSGFT
SLLMERLSVDYGKKSKLEFSIYPAPQVSTAVVEPYNSILTTHTTLEHSDCAFMVDNEAIYDICRRNLDIERPTYT
NLNRLISQIVSSITASLRFDGALNVDLTEFQTNLVPYPRIHFPLATYAPVISAEKAYHEQLTVAEITNACFEPAN
QMVKCDPRHGKYMACCLLYRGDVVPKDVNAAIATIKTKRTIQFVDWCPTGFKVGINYQPPTVVPGGDLAKVQRAV
CMLSNTTAVAEAWARLDHKFDLMYAKRAFVHWYVGEGMEEGEFSEAREDMAALEKDYEEVGADSADGEDEGEEY

872/2682 FIGURE 802

GGGGCTACCGCGCCTTTGCTTCCTGGCGCACGCGGAGCCTCCTGGAGCCTGCCACCATCCTGCCTACTACGTGCT GCCCTGCGCCGCAGCC<u>ATG</u>TGCCGCACCCTGGCCGCCTTCCCCACCACCTGCCTGGAGAGAGCCAAAGAGTTCA AGACACGTCTGGGGATCTTTCTTCACAAATCAGAGCTGGGCTGCGATACTGGGAGTACTGGCAAGTCCGAGTGGG GCAGTAAACACAGCAAAGAGAATAGAAACTTCTCAGAAGATGTGCTGGGGTGGAGAGAGTCGTTCGACCTGCTGC TGAGCAGTAAAAATGGAGTGGCTGCCTTCCACGCTTTCCTGAAGACAGAGTTCAGTGAGGAGAACCTGGAGTTCT GGCTGGCCTGTGAGGAGTTCAAGAAGATCCGATCAGCTACCAAGCTGGCCTCCAGGGCACACCAGATCTTTGAGG AGTTCATTTGCAGTGAGGCCCCTAAAGAGGTCAACATTGACCATGAGACCCGCGAGCTGACGAGGATGAACCTGC AGACTGCCACAGCCACATGCTTTGATGCGGCTCAGGGGAAGACACGTACCCTGATGGAGAAGGACTCCTACCCAC GCTTCCTGAAGTCGCCTGCTTACCGGGACCTGGCTGCCCAAGCCTCAGCCGCCTCTGCCACTCTGTCCAGCTGCA ${\tt GCCTGGACGAGCCCTCACACCC\underline{TGA}_{G}} {\tt GCCTGCACGGCAGTGAGGAAGCCAGCCGGGAAGAGAGGTTGAGTCACCC}$ AAAAAAAAAATGCGCTCCAGCAGCCTGTTTGGGAAGCAGCCTCTCTCCTTCAGATACTGTGGGACTCATGCTG GAGAGGAGCCGCCCACTTCCAGGACCTGTGAATAAGGGCTAATGATGAGGGTTGGTGGGGCTCTCTGTGGGGCCAA TGTGGATAAAGGGAACCATGAAAATGAGAGGAGGAAAGACATCCAGATCAGCTGTTTTGCCTGTTGCTCAGTTGA $\verb|CTCTGATTGCATCCTGTTTTCCTAATTCCCAGACTGTTCTGGGCACGGAAGGGACCCTGGATGTGGAGTCTTCCC| \\$ CTTTGGCCCTCCTCACTGGCCTCTGGGCTAGCCCAGAGTCCCTTAGCTTGTACCTCGTAACACTCCTGTGTGTCT GTCCAGCCTTGCAGTCATGTCAAGGCCAGCAAGCTGATGTGACTCTTGCCCCATGCGAGATATTTATACCTCAAA CACTGGCCTGTGAGCCCTTTCCAAGTCAGTGGAGAGCCCTGAAAGGAGGCTCACTTGAATCCAGCTCAGTGCTCT TCTTCCTGGATGTGCCCTCTCTGAGTTCTGTGCTGTCTCTTGGAGGCCAGGGCCCAGGAGAACAAAGTGTGGAGGC CTCGGGGAGTGGCTTTTCCAGCTCTCATGCCCCGCAGTGTGGAACAAGGCAGAAAAGGATCCTAGGAAATAAGTC TCTTGGCGGTCCCTGAGAGTCCTGCTGAAATCCAGCCAGTGTTTTTTTGTGGTATGAGAACAGGCAAAAAGAGATG CCCCGAGATAGAAGGGGAGCCTTGTGTTTCCTTCCTGCAGACGTGAGATGAACACTGGAGTGGGCAGAGGTGGCM CAGGACCATGGCACCCTTAGAGTGCAGAAGCTGGGGGGGAGAGGCTGCTTCGAAGGGCAGGACTGGGGATACCTGC CTGTCACCTCAGGGCATCACTGAACAAACATTTCCTGATGGSAACTCCTGCGGCAGAGCCCAGGCTGGGGAAGTG AACTACCCAGGGCAGCCCCTTTGTGGCCCAGGATAATCAACACTGTTCTCTCTGTACCATGAGCTCCTCCAGGAG ATTATTTAAGTGTATTGTATCATTGGTTTTCTGTGATTGTCATAACATTGTTTTTTGTTATTGTTGGTGCTGTTGT TATTTATTGTAATTTCAGTTTGCCTCTACTGGAGAATCTCAGCAGGGGTTTCAGCCTGACTGTCTCCCTTTC TCTACCAGACTCTACCTCTGAATGTGCTGGGAACCTCTTGGAGCCTGTCAGGAACTCCTCACTGTTTAAATATTT ATTTATTGTGACAAATGGAGCTGGTTTCCTAGATATGAATGTTTTGCAATCCCCATTTTCCTGTTTCAGCATG

873/2682 FIGURE 803

MCRTLAAFPTTCLERAKEFKTRLGIFLHKSELGCDTGSTGKSEWGSKHSKENRNFSEDVLGWRESFDLLLSSKNG VAAFHAFLKTEFSEENLEFWLACEEFKKIRSATKLASRAHQIFEEFICSEAPKEVNIDHETRELTRMNLQTATAT CFDAAQGKTRTLMEKDSYPRFLKSPAYRDLAAQASAASATLSSCSLDEPSHT

874/2682 FIGURE 804

GGATCCGCGCGCGCACACGTGCGACGGCCGTGATGAAGTTCGCTTACCGGTTTTCAAATTTGCTGGGTACGGTGTA $\verb|CCGGCGTGGGAACCTAAATTTTACCTGCAATGGAAATTCAGTTATCAGTCCCGTGGGCAATAGAGTCACTGTATT|\\$ TGACCTTAAAAACAACTCTGACACGCTGCCCCTGGCCACTCGGTACAACGTCAAGTGCGTGGGGCTGTCCCC GGATGGCCGCCTCGCTATCATCGTCGATGAAGGGGGCGATGCGCTGGTCAGCCTGGTCTGCAGGTCTGTGCT GCACCACTTCCACTTCAAGGGCTCTGTGCACAGTGTGTCCTTCTCCCCTGATGGCAGGAAGTTTGTTGTCACAAA GGGTAACATTGCCCAGATGTATCATGCCCCTGGGAAGAAGCGGGAGTTCAACGCCTTCGTTCTGGACAAGACCTA TTTTGGGCCCTACGATGAGACCACCTGCATCGACTGGACGGATGACTCCAGGTGCTTTGTGGTTGGGAGCAAAGA CATGTCCACCTGGGTGTTCGGAGCCGAGCGCTGGGACAACCTCATCTACTATGCACTGGGGGGACATAAGGATGC GCAGTGTGACACGCCCCCGAGGGCTTGCGGCTGAAGCCCCCTGCGGGCTGGAAAGCAGACCTGTTGCAGCGGGA GGAGGAGAACACGGAAAAGTGAAGTACTCACGGCTGGCCAAGTACTTCTTCAATAAAGAAGGGGATTTTAACAA CCTGACAGCTGCAGCATTTCATAAGAAGTCTCACCTCTTGGTCACTGGCTTTGCTTCTGGAATCTTCCATCTTCA TGAGCTGCCAGAGTTTAACCTCATCCACTCCCTGAGCATCTCAGATCAGAGCATCGCCTCAGTGGCCATCAATAG CGTGCTCAAGCAGCAGGGCCACTTCAACAGCATGGTGGCCCTGGCCTACTCGCCCGACGGACAGTACATCGTGAC TGGCGGGGACGACGGCAAGGTCAAGGTGTGGAATACCCTCAGCGGCTTCTGCTTCGTCACTTTTACGGAGCACTC CAGCGGGGTGACCGGTGTGACCTTTACTGCCACCGGCTACGTTGTGGTGACCTCATCCATGGACGGGACCGTGCG GGTGGATGCGAGCGGTGAGATCGTCTCTGCAGGGGCGCAGGACTCCTTTGAGATTTTCGTGTGGTCCATGCAGAC AGGCAGGCTCCTTGATGTTTTGTCTGGACACGAAGGGCCCATCAGTGGTCTGTGTTTTAACCCAATGAAGTCCGT $\verb|CCTGGCCAGTGCCTCCTGGGACAAGACGGTGCGCCTATGGGACATGTTTGACAGCTGGAGGACCAAGGAGACGCT|\\$ CAGGAAGGAGCTGGACAAGATTACAGCCAAGCACGCCCAAGGGGCAAGGCCTTCACCGCCCTGTGCTACTCTGC AGACGGCCACAGCATCCTGGCGGGAGGCATGTCCAAGTTCGTGTGCATCTACCACGTCCGTGAGCAGATTCTCAT GAAGAGGTTCGAGATCTCTTGCAACCTGTCTCTGGACGCCATGGAGGAATTTTTGAACCGAAGAAAAATGACAGA GTTTGGCAACCTGGCACTAATTGATCAGGATGCTGGGCAGGAGGATGGAGTCGCGATACCACTGCCAGGCGTCAG GAAAGGTGACATGAGTTCTCGGCACTTCAAACCTGAGATCAGGGTGACCTCACTCCGCTTCTCTCCCACTGGGCG CTGCTGGGCGGCACCACCACGGAGGGACTCCTCATCTACTCCCTGGACACCCGCGTGCTCTTTGACCCGTTTGA GCTGGACACCAGCGTCACCCCCGGGAGGGTGCGCGAGGCACTGCGCCAGCAGGACTTCACCAGGGCCATCCTCAT GGCCCTCCGGCTCAACGAGAGCAAACTGGTGCAGGAGGCCCTGGAGGCGGTGCCCAGGGGCGAGATTGAAGTGGT CACCTCCTCCCTTCCTGAACTGTATGTGGAGAAAGTGCTGGAGTTTTTAGCTTCCTCCTTTGAAGTGTCTCGCCA CCTGGAATTCTACCTCCTCTGGACTCACAAACTGCTCATGTTGCACGGACAGAAGCTGAAGTCCAGAGCCGGGAC GCTGCTGCCTGTCATTCAGTTCCTCCAGAAGAGCATCCAGCGGCACCTGGACGACCTGTCGAAACTCTGTAGCTG GAACCACTATAACATGCAGTACGCACTAGCAGTTTCCAAGCAGCGGGGCACAAAACGCTCCCTAGACCCGCTGGG AAGTGAGGAGGAGGCAGAAGCATCTGAAGATGACAGCCTGCATCTGCTTGGAGGAGGAGGAGGAGACTCAGAAGA AGAGATGCTGGCCTAGAGCCAGCCGGTTGCAGCGTTGGATTGTGCCGGCTAAGACCTGCCAGGGAGATGGGACCC TTGTGCCACCTGGGCCAGCAAAGAGGGGGGCCCAGAGAACAGCTGAAATACTGTCACTAGTGGTAGTGACTTGC CTGGCCCCAGGAGCGGGCCCGTGTGAACGGTGATGAATGTTGAAAATGCGTCTCAGAGAGGTATTCACATGAACT TCTAACGTGAGGATGAAGTCTACACTTCAGATTAAAAAGGGTTATGTTGTA

875/2682 FIGURE 805

MKFAYRFSNLLGTVYRRGNLNFTCNGNSVISPVGNRVTVFDLKNNKSDTLPLATRYNVKCVGLSPDGRLAIIVDE
GGDALLVSLVCRSVLHHFHFKGSVHSVSFSPDGRKFVVTKGNIAQMYHAPGKKREFNAFVLDKTYFGPYDETTCI
DWTDDSRCFVVGSKDMSTWVFGAERWDNLIYYALGGHKDAIVACFFESNSLDLYSLSQDGVLCMWQCDTPPEGLR
LKPPAGWKADLLQREEEEEEEEDQEGDRETTIRGKATPAEEEKTGKVKYSRLAKYFFNKEGDFNNLTAAAFHKKS
HLLVTGFASGIFHLHELPEFNLIHSLSISDQSIASVAINSSGDWIAFGCSGLGQLLVWEWQSESYVLKQQGHFNS
MVALAYSPDGQYIVTGGDDGKVKVWNTLSGFCFVTFTEHSSGVTGVTFTATGYVVVTSSMDGTVRAFDLHRYRNF
RTFTSPRPTQFSCVAVDASGEIVSAGAQDSFEIFVWSMQTGRLLDVLSGHEGPISGLCFNPMKSVLASASWDKTV
RLWDMFDSWRTKETLALTSDALAVTFRPDGAELAVATLNSQITFWDPENAVQTGSIEGRHDLKTGRKELDKITAK
HAAKGKAFTALCYSADGHSILAGGMSKFVCIYHVREQILMKRFEISCNLSLDAMEEFLNRRKMTEFGNLALIDQD
AGQEDGVAIPLPGVRKGDMSSRHFKPEIRVTSLRFSPTGRCWAGTTTEGLLIYSLDTRVLFDPFELDTSVTPGRV
REALRQQDFTRAILMALRLNESKLVQEALEAVPRGEIEVVTSSLPELYVEKVLEFLASSFEVSRHLEFYLLWTHK
LLMLHGQKLKSRAGTLLPVIQFLQKSIQRHLDDLSKLCSWNHYNMQYALAVSKQRGTKRSLDPLGSEEEAEASED
DSLHLLGGGGRDSEEEMLA

876/2682 FIGURE 806

TAGGCGGCCCCTGCGCTGCCAGCTGGAGCCGGGCGGAGCCAGCGCCCCGGCGCAGGGTGGCTCTGCCAGTCCCC CCAGAAGCGGGTGGGCCAGGGCTCTGCGCACCGCTGGGGTTCGGGGCCCGGGACGCCGGGAGGAGGAGGCACCG CGCGGGTCCGACGCGGAGGCGTGCTCGGAACGCCGGGGGCTGCGGAGTGCATCAGCGCGGTCCAGCCCTCCGCC TGCCGGGCGCGAGCGTCTCCGCCGGCCCGGACCTGGGCTGGGCGCGTGGCGTTGCCTCGGAGCTCGCTGCCCGC CACTCCGTCCCGGCTGCGCCCCGGCCGCCACCATCTCGGCTGCGGGCCCCGGCTCGTCCGCGGTGCCCGC CGCGGCGGTGATCTCGGGCCCGGCGGCGGCGGGGCCGGGCCCGGTGTCCCCGCAGCACCACGAGCTGAC CTCGCTCTTCGAGTGTCCGGTCTGCTTTGACTATGTCCTGCCTCCTATTCTGCAGTGCCAGGCCGGGCACCTGGT GTGTAACCAATGCCGCCAGAAGTTGAGCTGCTGCCCGACGTGCAGGGGCGCCCTGACGCCCAGCATCAGGAACCT GGCTATGGAGAAGGTGGCCTCGGCAGTCCTGTTTCCCTGTAAGTATGCCACCACGGGCTGTTCCCTGACCCTGCA CCATACGGAGAAACCAGAACATGAAGACATATGTGAATACCGCCCCTACTCCTGCCCATGTCCTGGTGCTTCCTG CAAGTGGCAGGGGTCCCTGGAAGCTGTGATGTCCCATCTCATGCACGCCCACAAGAGCATTACCACCCTTCAGGA AGAAGACATCGTCTTTCTAGCTACAGACATTAACTTGCCAGGGGCTGTCGACTGGGTGATGATGCAGTCATGTTT TGGCCATCACTTCATGCTGGTGCTGGAGAAACAAGAGAAGTACGAAGGCCACCAGCAGTTTTTTGCCATCGTCCT GCTCATTGGCACCCGCAAGCAAGCCGAGAACTTTGCCTACAGACTGGAGTTGAATGGGAACCGGCGGAGATTGAC CTGGGAGGCCACGCCCCGCTCGATTCATGACGGTGTGGCTGCGGCCATCATGAACAGCGACTGCCTTGTTTTCGA CACAGCCATAGCACATCTTTTTGCAGATAATGGGAACCTTGGAATCAATGTTACTATTTCTACATGTTGTCCA<u>TG</u> ATGTGACTTCCGTAAACCTTCAAAATTATTTGGGCATACTGCTCTATGTTTAATAAAGGTTTTTATAGATGTTTT GACCCAACAAAGTTCATTAACCTGGGATGAATGGGGTTGGCCTGTTGGTGATTTGGATGCTGTTCTGTGATCTAA **AACAACTCTTATTGAATTGTATTTACTCCCTAAACAACACTTGACAGGCTGTTGCACAGGGCTTCTATAGATCAG** TGTGTTAGGAATGGGAGGCCCCTTCCTGCCTGCCTTCCCATATTGGTCCCTTGACATTGACAAAAGCACAGTGAC TGTCAGCAGATTCCTTTACTTTTGTTGTGGGAGGTAGGAATTGTTTTAATGCATTTTAAACAGTGTTTCTGAAA TTGGATGGCTGGCTAATAGACACTGAATCACCCGGAGTGCTTATCTTAAAATTGCAGATTTAGGGAGCCTGCCAA TTTAACAGTCTCATCAGTGATCTTTCAACAGTAATGTTTGAGAATTACTGGGTTAAATTGTGGAAAGGGTCCAGA TTTTAAAGGTGCTTTAAGGTTGCCCTCTGCCGATACTGTTTGTCTTTCTACTGTTTCATCCCCTAACTTCCCCCA

877/2682 FIGURE 807

 $\label{thm:condition} MSRPSSTGPSANKPCSKQPPPQPQHTPSPAAPPAAATISAAGPGSSAVPAAAAVISGPGGGGGAGPVSPQHHELT \\ SLFECPVCFDYVLPPILQCQAGHLVCNQCRQKLSCCPTCRGALTPSIRNLAMEKVASAVLFPCKYATTGCSLTLH \\ HTEKPEHEDICEYRPYSCPCPGASCKWQGSLEAVMSHLMHAHKSITTLQEEDIVFLATDINLPGAVDWVMMQSCF \\ GHHFMLVLEKQEKYEGHQQFFAIVLLIGTRKQAENFAYRLELNGNRRRLTWEATPRSIHDGVAAAIMNSDCLVFD \\ TAIAHLFADNGNLGINVTISTCCP$

878/2682 FIGURE 808

GAGCCCAGCCGAGCGTCCGCCGCTGCCCCTTGCGCTCTGCGCTCCGCGCCCATCGCCCTCAACTCCCTGGAGG CGGTGAAACGCAAGATCCAGGCCCTGCAGCAGCAGGCGGACGAGGCGGAAGACCGCGCGCAGGGCCTGCAGCGGG AGCTGGACGGCGAGCGCGGCGCGGAAAAGCTGAAGGTGATGTGGCCGCCCTCAACCGACGCATCCAGCTCG TTGAGGAGGAGTTGGACAGGGCTCAGGAACGACTGGCCACGGCCCTGCAGAAGCTGGAGGAGGAGAAAAAAGCTG CAGATGAGAGTGAGAGAGAATGAAGGTGATAGAAAACCGGGCCATGAAGGATGAGGAGAAGATGGAGATTCAGG AGATGCAGCTCAAAGAGGCCAAGCACATTGCGGAAGAGGCTGACCGCAAATACGAGGAGGTAGCTCGTAAGCTGG TCATCCTGGAGGGTGAGCTGGAGAGGGCAGAGGAGCGTGCGGAGGTGTCTGAACTAAAATGTGGTGACCTGGAAG AAGAACTCAAGAATGTTACTAACAATCTGAAATCTCTGGAGGCTGCATCTGAAAAGTATTCTGAAAAGGAGGACA AATATGAAGAAGAAATTAAACTTCTGTCTGACAAACTGAAAGAGGCTGAGACCCGTGCTGAATTTGCAGAGAGAA CGGTTGCAAAACTGGAAAAGACAATTGATGACCTGGAAGAAAACTTGCCCAGGCCAAAGAAGAAAGTGGGGCT TACATCAGACACTGGATCAGACACTAAACGAACTTAACTGTATATAAGCAAAACAGAAGAGTCTTGTTCCAACAG AAACTCTGGAGCTCCGTGGGTCTTTCTCTTCTCTTGTAAGAAGTTCCTTTTGTTATTGCCATCTTCGCTTTGCTG GAAATGTCAAGCAAATTATGAATACATGACCAAATATTTTGTATCGGAGAAGCTTTGAGCACCAGTTAAATCTCA TTCCTTCCCTTTTTTTTCAAATGGCACCAGCTTTTTCAGCTCTCTTATTTTTTCCTTAAGTAGCATTTATTCCT AAGGTAGGCAGGGTATTTCCTAGTAAGCATACTTTCTTAAGACGGAGGCCATTTGGTTCCTGGGAGAATAGGCAG CCCCACACTTTGAAGAATACAGACCCCAGTATCTAGTCGTGGATATAATTAAAACGCTGAAGACCATAACCTTTT GCCCTTCTCCACTCTCCACCATGCAGGACAAACATCTTCTCAAGCAGTCAACGTAGAATGCTTGGGAAATAGTCA CATTCTAAAGTTGTTCCCTGGCCGGGAGCGTTTGCTTTCGCCTGTAATCCCAACACTTTGGGAGGCCAGGACAGA TCACTTGAGGTCAGGAGTTCGAGACCAGCCCAGCCAACATGGCGAAACCATGTCTCTACTAAAAATACAAAAATT ATGGTGACGCCTGCCTGTAGTCCCAGCTACTCGGGAGGCTGAGGCAGGATCGCTTGAACCCAGGAAGTGGAG ACTGCAGTGAGCCGATATCGCACCACAGCGCTCCAGCCTGGTCGACAGAGTGAGACTCCATCTCAAGAAAAAATA **AAAATAAAGTTGTTCTCTGAAGAGCAAATGTCTCATTCCAGTAATGACCCACTCAGCAGGAATATGGTGGAGTTC** AGTCCAATTCAGGTCAGCCATATCCAAAAGACCACAAGTCATTACTAAGTTGAGCAAAAGAGTTTTTATCTATTA GCAGAAAGGGCCTCTCTGGCAGCAGAGATTAAAAACTGGCCCAACTTCATTTCCATACTTCAGGGAACAGCAAAT TGAGGATTTACTTATCTAGGACTT

879/2682 FIGURE 809

MAGLNSLEAVKRKIQALQQQADEAEDRAQGLQRELDGERERREKAEGDVAALNRRIQLVEEELDRAQERLATALQ KLEEAEKAADESERGMKVIENRAMKDEEKMEIQEMQLKEAKHIAEEADRKYEEVARKLVILEGELERAEERAEVS ELKCGDLEEELKNVTNNLKSLEAASEKYSEKEDKYEEEIKLLSDKLKEAETRAEFAERTVAKLEKTIDDLEEKLA QAKEENVGLHQTLDQTLNELNCI

880/2682 FIGURE 810A

ATCTTTTTTCATCTTCTAGCTGTAGCTCGGGCTGCTTGTCGGCTTGGCTCCCCCCTCCCCCCTTTGCTCTGCCT AAAAATAATAAAGAGAGCCAAGCAGAAGAGGAGGCGAGAAGCATGAAGTGTTAACTCCCCCGTGCCAAGGCCCGC $\tt CGGCGACGGCGAGCCCTTCCTTATGCAAAGCGCGCAGCAGCGCGAAGGCGGGACGCCGCGCACCGGGCCGGGCT$ GGCTCGGCGCGAAGGAGGCGAAGGAGGAGGGGCCGAGGGAGCACATTGGCGTGAGCAGGGGGG CCACCGCCGCGAAGCTAGAAGCGCCCCAGCCCGGCAAGCTGGCTCACCCGCTGGCCACCCAGCACAGCCCGCTG GCCCCTCTCCTGCAGCCCATCTGGCGGAGCGGCGGCGGCGGCGGCGGCGGCAGGAGAATCGCAACTGGCA ATGAGCAACTCCGACCTGCCCACCAGTCCCCTGGCCATGGAATATGTTAATGACTTCGATCTGATGAAGTTTGAA GTGAAAAAGGAACCGGTGGAGACCGACCGCATCATCAGCCAGTGCGGCCGTCTCATCGCCGGGGGCTCGCTGTCC TCCACCCCATGAGCACGCCGTGCAGCTCGGTGCCCCCTTCCCCCAGCTTCTCGGCGCCCAGCCCGGGCTCGGGC AGCGAGCAGAAGGCGCACCTGGAAGACTACTACTGGATGACCGGCTACCCGCAGCAGCTGAACCCCGAGGCGCTG GGCTTCAGCCCCGAGGACGCGGTCGAGGCGCTCATCAGCAACAGCCACCAGCTCCAGGGCGGCTTCGATGGCTAC ATGGGCCCCGCGGCCGCGTGTGTCCCCCGTGATCGCCGCGCCGCCGCGCAGAGCGGCCGCGCGCACTAC GGCGGCGGAGGCGGGGGGGGGGGGGGGGGGGGGGGGGCCCTGCACCCGCACCACGCCGGCGGCGGCCTGCAC TTCGACGACCGCTTCTCCGACGAGCAGCTGGTGACCATGTCTGTGCGCGGAGCTGAACCGGCAGCTGCGCGGGGTC AGCAAGGAGGAGGTGATCCGGCTGAAGCAGAAGAGGCGGACCCTGAAAAACCGCGGCTATGCCCAGTCCTGCCGC TTCAAGAGGGTGCAGCAGAGACACGTCCTGGAGTCGGAGAAGAACCAGCTGCTGCAGCAAGTCGACCACCTCAAG CAGGAGATCTCCAGGCTGGTGCGCGAGAGGGACGCGTACAAGGAGAAATACGAGAAGTTGGTGAGCAGCGGCTTC CGAGAAAACGGCTCGAGCAGCGACAACCCGTCCTCTCCCGAGTTTTTCATG<u>TGA</u>GTCTGACACGCGATTCCAGCT AGCCACCCTGATAAGTGCTCCGCGGGGGTCCGGCTCGGGTGTGGGCCTTGCTAGTTCTAGAGCCATGCTCGCCACC ACACACACACACACACACACACACACACCCCACACCCTGCTCGAGTTTGTGGTGGTGGTGGCTGTTTTAAACT TTTTTTTTACACCCCCCCCCCCCCCCCCCCCGGACTTGCACAATGTTCAATGATCTCAGCAGAGTTCTTCATGTGA AACGTTGATCACCTTTGAAGCCTGCATCATTCACATATTTTTTTCTTCTTCTTCCCCTTCAGTTCATGAACTGGTG ATGAACCTTCCACAATCAAGCCTGCATCAACCTTCTGGGTGTGACTTGTGAGTTTTGGCCTTGTGATGCCAAATC GACATATATGGTATAATTATTTTTTCCTTTTTTTTCCTTTTGGCTTGGAAATGGACGTTCGAAGACTTATAGCA TGGCATTCATACTTTTGTTTTATTGCCTCATGACTTTTTTGAGTTTAGAACAAAACAGTGCAACCGTAGAGCCTT CTTCCCATGAAATTTTGCATCTGCTCCAAAACTGCTTTGAGTTACTCAGAACTTCAACCTCCCAATGCACTGAAG GCATTCCTTGTCAAAGATACCAGAATGGGTTACACATTTAACCTGGCAAACATTGAAGAACTCTTAATGTTTTCT TGCTACAGATAAAGGAATGTTATAGATAAATTTGAAAGAGTTAGGTCTGTTTAGCTGTAGATTTTTTAAACGATT GATGCACTAAATTGTTTACTATTGTGATGTTAAGGGGGGGTAGAGTTTGCAAGGGGGACTGTTTAAAAAAAGTAGCT

881/2682 FIGURE 810B

882/2682 FIGURE 811

883/2682 FIGURE 812

GCGCCGGGCTCCGTCGCCGCCAGCCCCGCGGGTCGCCCTCCCGTGCCTCGCCCGCGGACACCCTGGCCGTGGA TATCTGGCCTTCGCTGCCTCGAACGTGCGCGGCTCGCTCAACGTCAACCTCAACTCGGTGGTGCTGCGGCGGGCC CGTGTCGTCCTCACCTCGCTACTCGCTTGCCTACCCGCCGGCCCGCGGGTCTACTTCCTCAAAGGGGGATATGAG ACTTTCTACTCGGAATATCCTGAGTGTTGCGTGGATGTAAAACCCATTTCACAAGAGAAGATTGAGAGTGAGAGA GCCCTCATCAGCCAGTGTGGAAAACCAGTGGTAAATGTCAGCTACAGGCCAGCTTATGACCAGGGTGGCCCAGTT GAAATCCTTCCCTTCCTCTACCTTGGAAGTGCCTACCATGCATCCAAGTGCGAGTTCCTCGCCAACTTGCACATC ACAGCCCTGCTGAATGTCTCCCGACGGACCTCCGAGGCCTGCATGACCCCACCTACACTACAAATGGATCCCTGTG GAAGACAGCCACACGGCTGACATTAGCTCCCACTTTCAAGAAGCAATAGACTTCATTGACTGTGTCAGGGAAAAG ACCAAGCAGTTCCGCCTGAAGGAGGCCTTCGATTACATCAAGCAGAGGAGGAGCATGGTCTCGCCCAACTTTGGC TTCATGGGCCAGCTCCTGCAGTACGAATCTGAGATCCTGCCCTCCACGCCCAACCCCCAGCCTCCCTGCCAA GGGGAGGCAGCAGGCTCTTCACTGATAGGCCATTTGCAGACACTGAGCCCTGACATGCAGGGTGCCTACTGCACA TTCCCTGCCTCGGTGCTGGCACCGGTGCCTACCCACTCAACAGTCTCAGAGCTCAGCAGAAGCCCTGTGGCAACG ${\tt GCCACATCCTGC} \underline{{\tt TAA}}{\tt AACTGGGATGGAGGAATCGGCCCAGCCCCAAGAGCAACTGTGATTTTTGTTTTTAAGACT$ AGCACAGCATGTGCTGACTACTGTACTTCCAGACCCCTGCCCTCTTGGGACTGCCCAGTCCTTGCACCTCAGAGT AAAGGCAGTTATGAAGCCAATTCATTTTGAAGGAAGCACAATTTCCACCTTATTTTTTGAACTTTGGCAGTTTCA ATGTCTGTCTCTGTTGCTTCGGGGCATAAGCTGATCACCGTCTAGTTGGGAAAGTCACCCTACAGGGTTTGTAGG GACATGATCAGCATCCTGATTTGAACCCTGAAATGTTGTGTAGACACCCTCTTGGGTCCAATGAGGTAGTTGGTT GAAGTAGCAAGATGTTGGCTTTTCTGGATTTTTTTTGCCATGGGTTCTTCACTGACCTTGGACTTTGGCATGATT CTTAGTCATACTTGAACTTGTCTCATTCCACCTCTTCTCAGAGCAACTCTTCCTTTGGGAAAAGAGTTCTTCAGA TCATAGACCAAAAAAGTCATACCTTCGAGGTGGTAGCAGTAGATTCCAGGAGGAGAAGGGTACTTGCTAGGTATC CTGGGTCAGTGGCGTGCAAACTGGTTTCCTCAGCTGCCTGTCCTTCTGTGTGCTTATGTCTCTTGTGACAATTG TTTTCCTCCCTGCCCCTGGAGGTTGTCTTCAACTGTGGACTTCTGGGATTTGCAGATTTTGCAACGTGGTACTAC AGAAAAGCAGTATGTTACTGGTTGTTGTTGTTCTTGTTTTTTATATGTAAAATAAAAATAGTGAAAGGAG

884/2682 FIGURE 813

MKVTSLDGRQLRKMLRKEAAARCVVLDCRPYLAFAASNVRGSLNVNLNSVVLRRARGGAVSARYVLPDEAARARL LQEGGGGVAAVVVLDQGSRHWQKLREESAARVVLTSLLACLPAGPRVYFLKGGYETFYSEYPECCVDVKPISQEK IESERALISQCGKPVVNVSYRPAYDQGGPVEILPFLYLGSAYHASKCEFLANLHITALLNVSRRTSEACMTHLHY KWIPVEDSHTADISSHFQEAIDFIDCVREKGGKVLVHCEAGISRSPTICMAYLMKTKQFRLKEAFDYIKQRRSMV SPNFGFMGQLLQYESEILPSTPNPQPPSCQGEAAGSSLIGHLQTLSPDMQGAYCTFPASVLAPVPTHSTVSELSR SPVATATSC

885/2682 FIGURE 814

AGCCGCCGCCTCGCCGCTCGTCGGAGCGGCCGCTCGTCCGCCCGGCTTGAGGCCCGCGGGGAGCGCGGC GCAATTCGTCGGCCCGCGGGGGGGGGCCTCCCGGCATCTTCGCGGCGACCAAGGACTACCAGGAAGGGGAGCGG CTGGGATGGCGCCCCGCGGCCCCGCGAGTACAAAGCGGGCGACCTGGTCTTCGCCAAGATGAAGGGCTACCCGC ACTGGCCGGCCCGGATTGATGAACTCCCAGAGGGCGCTGTGAAGCCTCCAGCAAACAAGTATCCTATCTTTTT TTGGCACCCATGAAACTGCATTTCTAGGTCCCAAAGACCTTTTTCCATATAAGGAGTACAAAGACAAGTTTGGAA AGTCAAACAAACGGAAAGGATTTAACGAAGGATTGTGGGAAATAGAAAATAACCCAGGAGTAAAGTTTACTGGCT ACCAGGCAATTCAGCAACAGAGCTCTTCAGAAACTGAGGGAGAAGGTGGAAATACTGCAGATGCAAGCAGTGAGG AAGAAGGTGATAGAAGAAGAAGAAGGCAAAAGAAAGAATGAAAAAGCAGGCTCAAAACGGAAAAAGT CATATACTTCAAAGAAATCCTCTAAACAGTCCCGGAAATCTCCAGGAGATGAAGATGACAAAGACTGCAAAGAAG AGGAAAACAAAAGCAGCTCTGAGGGTGGAGATGCGGGCAACGACAACAAAAACACAACTTCAGACTTGCAGAAAA $\verb|CCAGTGAAGGGACC| \textbf{TAA} | \texttt{CTACCATAATGAATGCTGCATATTAAGAGAAACCACAAGAAGGTTATATGTTTGGTTG|} \\$ ATTATTCATATTCCTCTCTGTTGTGTTTCGGGGGGAAAAGACATTTTAGCCTTTTTTAAAAGTTACTGATTTAAT TTCATGTTATTTGGTTGCATGAAGTTGCCCTTAACCACTAAGGATTATCAAGATTTTTGCGCAGACTTATACATG TCTAGGATCCTTTTATCAAGGCAGTTATGATCATCGTTTTCCTGCCTTGACCCCACCATCATCAAACACTCAGTT AAATATAAATTAACATTTTTTAGATGACCACTCAACATAATGCTTAAGAATGGAATTTCCTCTCTGTGACAGAAC CCAGGAATTAATTCCTAAATACATAACGTTGGTATATTGAAGACGAAATTAAAATTGTCCTTCAGTTTTGAGGCC ATGTGTAAAGTTTAACCATATTGTAAAATATCTATTCCGTATTAGAAATAGCTAGTTGACAGCTTATACTTCTCA AAATTCATATTGTTATGTACACAAACTAAGTTTCTATATGTGAAGTTAGTGAGTCTTTTTGTGTTACTCCAAAAT AAAGGCAATGATTTATTTTTTCCCAGTGCCAATACAATTTTGAGCTAAGCACTCAAGGTGGATACTTTACATTT TAAAGCTGGAATCAGCAACAGCCCTATGGGAAACCAGACAAAGCATTGACTTTTAAATGTAGACTTTTAAAATAA ACTGTTTTCTTTTGGAACTACAATTAGAATAGTTAATATTCATCCTTAAACCATTATTATGTGTACATTATTGTT GCTATTGTGATAATAGAGAATTTTATTTATTTTATGCCAGCTTATATTGTGAGAACACATTTAGTCAGTTTGGG TTTTATCAATCCTGTTAATGCTTGTCCTTGGAACATCTTTCGCGTATTCACGGTTTGTAGTTGAAAAGTTTACTG TAAAAAATCAAAAACAAAAAATGTATTGTTTTTACAGAATAAATTTATTGGGATGTGTACTGGGAGTAAGATT TGAGGTTGTAAGCAAACTAAGTTAGTGTAATTTGGCTTCATATATGTAACGTGAGGTATTAATGTAATTCATATA TTAAAGCAAAAATTGTTCGCAGC

886/2682 FIGURE 815,

MARPRPREYKAGDLVFAKMKGYPHWPARIDELPEGAVKPPANKYPIFFFGTHETAFLGPKDLFPYKEYKDKFGKS NKRKGFNEGLWEIENNPGVKFTGYQAIQQQSSSETEGEGGNTADASSEEEGDRVEEDGKGKRKNEKAGSKRKKSY TSKKSSKQSRKSPGDEDDKDCKEEENKSSSEGGDAGNDTRNTTSDLQKTSEGT

887/2682 FIGURE 816

GGCACGAGGCACGTGGTTATGCTGCCGGAGTTTGGGCCGCCACTGTAGGAAAAGTAACTTCAGCTGCAGCCCCAA ${\tt CAGAGAAGTTGCAACGCATCACGGTGCACAAGGAGCTGGAGCTGCAGTTTGACCTGGGCAACCTGCTGGCGTCGG}$ ACCGGAACCCCCGACCGGGCTGCGGTGCGCCGGACCCACGCCGGAGCCCACGCCGAGCTACAGGCCCTGGCGCGGGACA CGGAGCCCACCACACGCCTGCCGCGAGAGAGCCTCTGCCCCGACCGCCGCCACTTACACGCTGGCAGCAGTTCG GCTGGGGCTACCAGCGCCCGGGACGACACCAAAGAATGGCTGATTGAGGTGCCCGGCAATGCCGACCCCTTGG AGGACCAGTTCGCCAAGCGGATTCAGGCCAAGAAGGAAAGGGTGGCCAAGAACGAGCTGAACCGGCTGCGTAACC TGGGCCGCCATGCAAGTGGCCAAGGTCTCCACCGCCTCTGTGGGGCGCTTTCAGGAGCGCCTCCCCAAGGAGA AGGTGCCCCGGGGCTCCGGCAAGAAAGGAAGTTTCAACCCCTTTTCGGGGACTTTGCAGCCGAGAAAAAGAACC AGTTGGAGCTGCTTCGTGTCATGAACAGCAAGAAGCCTCAGCTGGATGTGACTAGGGCCACCAATAAGCAGATGA GGGAGGAGGACCAGGAGGAGGCCGCCAAGAGGAGGAAAATGAGCCAGAAGGGCAAGAGAAAAGGGAGGCCGGCAGG GGCCTGGGGGCAAGAGGAAAGGGGGCCCGCCCAGCCAGGGAAGAGGAAAGGGGGCTTGGGAGGCAAGATGA TTCTAACTGTCGGACCCGTCTGTAAACCAAGGACTATGAATACTAAATGTTAAGTTCTAGGCAATTATACGGGGA CTCAGAAGGACCTGCCGCCGCCTTCATTGAGTTTAAAGGGACAGGATTGCCCTTCCGTCAAGAAAGTATGTAAG TGTTGGACTGCACAAATTAATGTTTTTCCCACAACCGAGACTTTGGAGATTAAGAACTTATTTGAGGATTTAAGA GATATACGGCGAGGTAGAGTTGGCCATATTTCAGAGACTTAGATTGACGTATATGTTTCTGCATTATTTTTACAA

888/2682 FIGURE 817

MEGQSVEELLAKAEQDEAEKLQRITVHKELELQFDLGNLLASDRNPPTGLRCAGPTPEAELQALARDNTQLLINQ LWQLPTERVEEAIVARLPEPTTRLPREKPLPRPRPLTRWQQFARLKGIRPKKKTNLVWDEVSGQWRRRWGYQRAR DDTKEWLIEVPGNADPLEDQFAKRIQAKKERVAKNELNRLRNLARAHKMQLPSAAGLHPTGHQSKEELGRAMQVA KVSTASVGRFQERLPKEKVPRGSGKKRKFQPLFGDFAAEKKNQLELLRVMNSKKPQLDVTRATNKQMREEDQEEA AKRRKMSQKGKRKGGRQGPGGKRKGGPPSQGGKRKGGLGGKMNSGPPGLGGKRKGGQRPGGKRRK

889/2682 FIGURE 818

AGCAGGAGCAGGAGACGCGGAGCTCGGAGCGCTGAGCTGACCTGCCGGAGCCGGGCGTGGGCTGCAGCCTCGGAG $\mathtt{CTCCCGGAACG}$ TCGACACCATTCCCCTGATGACGCCCCTCGATGTCAATCAGCTGCAGTTCCCGCCCCCGGATAAGGTGGTCGTGA AAACTAAGACCGAGTATGAACCTGACCGCAAGAAAGGGAAAGCACGTCCTCCCCAAATTGCTGAGTTCACCGTCA GCATCACGGAGGGTGTCACCGAGAGGTTTAAGGTCTCCGTGTTGGTCCTCTTCGCCCTGGCCTTCCTCACCTGCG TCGTCTTCCTGGTTGTCTACAAGGTGTACAAGTATGACCGCGCCTGCCCCGATGGGTTCGTCCTCAAGAACACCC AGTGCATCCCAGAAGGCTTGGAGAGCTACTACGCGGAGCAAGACTCCAGTGCCCGGGAGAAATTTTACACAGTCA TAAACCACTACAACCTGGCCAAGCAGGAGCATCACGCGCTCCGTATCGCCCTGGATGTCAGTTCTGTCAGAAGAGA ${\tt AGCTGTCCGAGCAGGAGACTGAAGCGGCTGAGAAGTCAGCT} {\color{red}{\textbf{TAG}}} {\color{red}{\textbf{CGGGGATGGGCAAGTTCCTTACAATGTGTCAC}}$ TTGCAAATAACAAAGGGACTTTGAGGGACATTTCATTAAATATAATTACTGATACTTTAGAGGTTACTCATTTAC AGTGCATTTCAGCATTGCCTAAAGAGCTCTGACACCACTTTTCATGTTAAGATCTTCATTTAGCTCCTTTACTGG GATTTATTGGATGCTGTAAAAAATAAATTTACACTGGATATGCGAAGGGTTTGGATCTCAGATAAATGCATTTT GTGGAATTGATTTCTGAACCGACCCTGCTGTCTGCAAACCTTCCTCCATAGCCATATCTAGAGTGATCTCTCGC TGTGCTAAGAGCAAGCCTACTTCGCATTTCTTCCTCGGCCATCAGCGGGTAACAGTGCTGACTGCCGAAGGTG CACTGTAGTAAGGTGTCTGGAGACACAGACCGTGACCTTGGCGCAGCGGTGTGCATCAGAGGCGTGTGCTGAGAA GGGTGGTGTTAAGCTGTGGAAAATGACTCAAGAGCAATAAATCAGTGCCAAAGCTTCCCTGCGCATCTGAATAGA CACAAGTGAAGCCCGTGTGCGCACAGTGCAGAGGCCGAGCCTGTATTTCCAGGTAGACGTGGACTTTATTGACTG AAA

890/2682 FIGURE 819

891/2682 FIGURE 820

GAGGGAAGTGTCGACTGCGCCGGCGGAACAGACATGCCTGCGGCCAAGAAGCAGAAGCTGAGCAGTGACGAGAAA CAGCAATCCAGAACTCTCTGGAGACGAGAATGATGACGCTGTCAGTATAGAAAGTGGTACAAACACTGAACGCCC TGATACACCTACAAACACGCCAAATGCACCTGGAAGGAAAAGTTGGGGAAAAGGGAAAATGGAAGTCAAAGAAATG GCACAGTAAAGAAGGAGATCCATTAGTGTTTGCAACTGTAGGAAGCAACAGAGTTACCTTGTATGAATGTCATTC ACAAGGAGAAATCCGGTTGTTGCAATCTTACGTGGATGCTGATGATGAAAACTTTTACACTTGTGCATGGAC CTATGATAGCAATACGAGCCATCCTCTGCTGGCTGTAGCTGGATCTAGAGGCATAATTAGGATAATAAATCCTAT AAATCTTCTCCTGTCAGTAAGTAAAGATCATGCTTTACGATTATGGAATATCCAGACGGACACTCTGGTGGCAAT ATTTGGAGGCGTAGAAGGGCACAGAGATGAAGTTCTAAGTGCTGATTATGATCTTTTGGGTGAAAAAAATAATGTC CTGTGGTATGGATCATTCTCTTAAACTTTGGAGGATCAATTCAAAGAGAATGATGAATGCAATTAAGGAATCTTA TGATTATAATCCAAATAAAACTAACAGGCCATTTATTTCTCAGAAAATCCATTTTCCTGATTTTTCTACCAGAGA CATACATAGGAATTATGTTGATTGTGTGCGATGGTTAGGCGATTTGATACTTTCTAAGTCTTGTGAAAATGCCAT TGTGTGCTGGAAACCTGGCAAGATGGAAGATGATATAGATAAAATTAAACCCAGTGAATCTAATGTGACTATTCT TGGGCGATTTGATTACAGCCAGTGTGACATTTGGTACATGAGGTTTTCTATGGATTTCTGGCAAAAGATGCTTGC ATTGGGCAATCAAGTTGGCAAACTTTATGTTTGGGATTTAGAAGTAGAAGATCCTCATAAAGCCAAATGTACAAC ACTGACTCATCATAAATGTGGTGCTGCTATTCGACAAACCAGTTTTAGCAGGGATAGCAGCATTCTTATAGCTGT TTGTGATGATGCCAGTATTTGGCGCTGGGATCGACTTCGA<u>TAA</u>AATACTTTTGCCTAATCAAAATTAAAATGTGT TTGTTGTCTGTGTAAAATAAAATTAATGTATCTTGCTAGTAAGGGCACGTAGAGCATTTAGAGTTGTCTTTCAGC ATTCAATCAGGCTGAGCTGAATGTAGTGATGTTTACATTGTTTACATTCTTTGTACTGTCTTCCTGCTCAGACTC TACTGCTTTTAATAAAAATTTATTTTTG

892/2682 FIGURE 821

MPAAKKQKLSSDENSNPELSGDENDDAVSIESGTNTERPDTPTNTPNAPGRKSWGKGKWKSKKCKYSFKCVNSLK EDHNQPLFGVQFNWHSKEGDPLVFATVGSNRVTLYECHSQGEIRLLQSYVDADADENFYTCAWTYDSNTSHPLLA VAGSRGIIRIINPITMQCIKHYVGHGNAINELKFHPRDPNLLLSVSKDHALRLWNIQTDTLVAIFGGVEGHRDEV LSADYDLLGEKIMSCGMDHSLKLWRINSKRMMNAIKESYDYNPNKTNRPFISQKIHFPDFSTRDIHRNYVDCVRW LGDLILSKSCENAIVCWKPGKMEDDIDKIKPSESNVTILGRFDYSQCDIWYMRFSMDFWQKMLALGNQVGKLYVW DLEVEDPHKAKCTTLTHHKCGAAIRQTSFSRDSSILIAVCDDASIWRWDRLR

893/2682 FIGURE 822

GCACGAGGCGAGCTGGAGTGATCTTTATTCACA<u>ATG</u>TCTTTACAAAGGCTCCTGCAACACAGCAGCAATGGCAAT TTGGCGGACTTCTGCGCTGGGCCAGCGTATAGCTCTTACTCCACACTCACCGGCAGCCTTACGATGAACGATAAT AGTTCTTTAAGTGACTTTTCCTGGTCTCAAAGAAAGCTTGTTACTGTGGAGAAGCAGGATAATGAAACATTTGGA TTTGAAATTCAGTCTTACAGGCCCCAGAATCAGAATGCCTGCTCCTCGGAAATGTTCACTTTGATATGCAAAATA CAGGAGGACAGCCCAGCTCACTGTGCTGGCCTGCAAGCTGGTGATGTCCTTGCAAATATCAATGGTGTGAGCACA GAAGGTTTTACCTACAAACAAGTCGTTGACCTGATCAGATCGTCCGGAAACCTGCTAACGATAGAGACTCTTAAT GGAACAATGATTCTGAAAAGAACGGAGCTTGAAGCAAAGCTGCAGGTTTTAAAGCAAACTTTGAAACAAAATGG GTGGAGTACAGATCTCTGCAGTTACAGGAACATCGTCTGCTTCATGGTGATGCAGCTAATTGCCCCAGTTTGGAA TTATCCAGTGAGAGCAGCTGTAAGAGCTGGCTGAGCTCCATGACGATGGACAGTGAAGATGGCTACCAGACGTGT GTGTCTGAGGACTCCAGCAGGGGTGCCTTCAGTCGGCAGACGAGTACAGATGATGAGTGCTTTATCCCCAAGGAG GGGGATGATTTTCTGAGGAGGTCATCTTCAAGGAGGAACCGGAGCATCAGTAACACCAGCAGCGGATCCATGTCT CCCTTGTGGGAGGGCAACTTATCAAGCATGTTTGGGACCCTGCCCCGGAAGAGCAGAAAGGGAAGTGTCCGAAAG CAACTCTTGAAATTTATCCCTGGCCTTCATCGTGCTGTGGAAGAGGAAGAAGTCGCTTT<u>**TGA**</u>CGGATTGTGGTG TCCTTTCAAATTAGCTTATTTCACAAATATCTCTAGACTCACCCAGATCCCAGCTTGGTGGGAAAGTGCAGAAGA **AATAATTGAGAACTTTTTGGAGTCAAGTATGAATAAAGGTGTGGCAGAATATAATAATCTGGACTATTTTCTATA** GGATAATTGCTGGGTTATAAAATCTTAGGTTTGCTTATGCCCAGTAGCTCCTGCGGAGGCTTAATAATAGGCAAT TTTGAATTTGTTCAAACCTGTAATGGCTTGTAAACAAAGATGACCATCAGCTGTTTCTCACATCTATAGTGACAA TAAAGCGGGAAGTATAAGATTTAATAGGAGGGGTTAAGGTTCATGAGAACCATGGAAAGATGTGGTCTGAGATGG

894/2682 FIGURE 823

MSLQRLLQHSSNGNLADFCAGPAYSSYSTLTGSLTMNDNRRIQMLADTVATLPRGRKQLALTRSSSLSDFSWSQR KLVTVEKQDNETFGFEIQSYRPQNQNACSSEMFTLICKIQEDSPAHCAGLQAGDVLANINGVSTEGFTYKQVVDL IRSSGNLLTIETLNGTMILKRTELEAKLQVLKQTLKQKWVEYRSLQLQEHRLLHGDAANCPSLENMDLDELSLFG PLPGPGPALVDRNRLSSESSCKSWLSSMTMDSEDGYQTCVSEDSSRGAFSRQTSTDDECFIPKEGDDFLRRSSSR RNRSISNTSSGSMSPLWEGNLSSMFGTLPRKSRKGSVRKQLLKFIPGLHRAVEEEESRF

895/2682 FIGURE 824

ACTTTCCTGCCCCTTCCCCGGCCAAGCCCAACTCCGGATCTCCACCGGATCTCACCCGCACACCCCGGA CTAGCCCAGAGACATGGAGAGTTGCTACAACCCAGGTCTGGATGGTATTATTGAATATGATGATTTCAAATTGAA CTCCTCCATTGTGGAACCCAAGGAGCCAGCCCCAGAAACAGCTGATGGCCCCTACCTGGTGATCGTGGAACAGCC TAAGCAGAGGCTTCCGATTTCGATATGGCTGTGAAGGCCCCTCCCATGGAGGACTGCCCGGTGCCTCCAGTGA GAAGGGCCGAAAGACCTATCCCACTGTCAAGATCTGTAACTACGAGGGACCAGCCAAGATCGAGGTGGACCTGGT CGTTTCTGTGGGGCCCAAGGACATGACTGCCCAATTTAACAACCTGGGTGTCCTGCATGTGACTAAGAAGAACAT GATGGGGACTATGATACAAAAACTTCAGAGGCAGCGCTCCGCTCTAGGCCCCAGGGCCTTACGGAGGCCGAGCA GCGGGAGCTGGAGCAAGAGGCCAAAGAACTGAAGAAGGTGATGGATCTGAGTATAGTGCGGCTGCGCTTCTCTGC ATCTCCGGGGGCATCAAACCTGAAGATTTCTCGAATGGACAAGACAGCAGGCTCTGTGCGGGGTGGAGATGAAGT GGCCTTTGGGGACTTCTCCCCACAGATGTGCATAAACAGTATGCCATTGTGTTCCGGACACCCCCCTATCACAA ACAGTTCACCTATTACCCTCTGGTGGAAGACAAGGAAGAGGTGCAGCGGAAGCGGAAGGCCTTGCCCACCTT GTGCTACCCGGGAGGCGGGGGGGGGCGCAGATGGCCGCCACGGTGCCCAGCAGGACTCCGGGGAAGCCGC GGAGCCGAGCGCCCCCCCAGGACCCCCCAGTGCGAGCCCGCAGGCCCCGGAGATGCTGCAGCGAGCTCGAGAGTA CAACGCGCGCTGTTCGGCCTGGCGCACGCAGCCCCGAGCCCTACTCGACTACTGCGTCACCGCGGACGCCGCGC GCTGCTGGCGGGACAGCCCACCTGCTGACGGCGCAGGACGAGAACGGAGACACACCACTGCACCTAGCCATCAT ${\tt CCACGGGCAGACCAGTGTCATTGAGCAGATAGTCTATGTCATCCACCACGCCCAGGACCTCGGCGTTGTCAACCT}$ CACCAACCACCTGCACCAGACGCCCCTGCACCTGGCGGTGATCACGGGGCAGACGAGTGTGGTGAGCTTTCTGCT GCGGGTAGGTGCAGACCCAGCTCTGCTGGATCGGCATGGAGACTCAGCCATGCATCTGGCGCTGCGGGCAGGCGC TGGTGCTCCTGAGCTGCTGCGTGCACTGCTTCAGAGTGGAGCTCCTGCTGTGCCCCAGCTGTTGCATATGCCTGA CTTTGAGGGACTGTATCCAGTACACCTGGCGGTCCGAGCCCGAAGCCCTGAGTGCCTGGATCTGCTGGTGGACAG TGGGGCTGAAGTGGAGGCCACAGAGCGGCAGGGGGGACGAACAGCCTTGCATCTAGCCACAGAGATGGAGGAGCT GGGGTTGGTCACCCATCTGGTCACCAAGCTCCGGGCCAACGTGAACGCTCGCACCTTTGCGGGAAACACCCCCT GCACCTGGCAGCTGGACTGGGGTACCCGACCCTCACCCGCCTCCTTCTGAAGGCTGGTGCTGACATCCATGCTGA AAACGAGGAGCCCCTGTGCCCACTGCCTTCACCCCCTACCTCTGATAGCGACTCGGACTCTGAAGGGCCTGAGAA GGACACCCGAAGCAGCTTCCGGGGCCACACGCCTCTTGACCTCACTTGCAGCACCTTGGTGAAGACCTTGCTGCT AAATGCTGCTCAGAACACCATGGAGCCACCCCTGACCCCGCCCAGCCCAGGGGCCGGGACTGTCACTTGGTGA TACAGCTCTGCAGAACCTGGAGCAGCTGCTAGACGGGCCAGAAGCCCAGGGCAGCTGGGCAGAGCTGGCAGAGCG TCTGGGGCTGCGAGCCTGGTAGACACGTACCGACAGACAACCTCACCCAGTGGCAGCCTCCTGCGCAGCTACGA GCTGGCTGGCGGGGACCTGGCAGGTCTACTGGAGGCCCTGTCTGACATGGGCCTAGAGGAGGAGTGAGGCTGCT GGAGCAGGAGGCAGAGAAGCTGGGCCCACCCCTGAGCCACCAGGAGGGCTCTCGCACGGGCACCCCCAGCCTCA GGTGACTGACCTGCCGCCCCAGCCCCCTTCCCGGACCCCCTGTACAGCGTCCCCACCTATTTCAAATCTT ${\tt ATTTAACACCCCACACCCACCCCTCAGTTGGGACAAA} \underline{{\tt TAA}} {\tt AGGATTCTCATGGGAAGGGGAGGACCCCGAATTCC}$

896/2682 FIGURE 825

MESCYNPGLDGIIEYDDFKLNSSIVEPKEPAPETADGPYLVIVEQPKQRGFRFRYGCEGPSHGGLPGASSEKGRK
TYPTVKICNYEGPAKIEVDLVTHSDPPRAHAHSLVGKQCSELGICAVSVGPKDMTAQFNNLGVLHVTKKNMMGTM
IQKLQRQRLRSRPQGLTEAEQRELEQEAKELKKVMDLSIVRLRFSAFLRASDGSFSLPLKPVTSQPIHDSKSPGA
SNLKISRMDKTAGSVRGGDEVYLLCDKVQKDDIEVRFYEDDENGWQAFGDFSPTDVHKQYAIVFRTPPYHKMKIE
RPVTVFLQLKRKRGGDVSDSKQFTYYPLVEDKEEVQRKRRKALPTFSQPFGGGSHMGGGSGGAAGGYGGAGGGGS
LGFFPSSLAYSPYQSGAGPMRCYPGGGGGAQMAATVPSRDSGEEAAEPSAPSRTPQCEPQAPEMLQRAREYNARL
FGLAHAAPSPTRLLRHRGRRALLAGQRHLLTAQDENGDTPLHLAIIHGQTSVIEQIVYVIHHAQDLGVVNLTNHL
HQTPLHLAVITGQTSVVSFLLRVGADPALLDRHGDSAMHLALRAGAGAPELLRALLQSGAPAVPQLLHMPDFEGL
YPVHLAVRARSPECLDLLVDSGAEVEATERQGGRTALHLATEMEELGLVTHLVTKLRANVNARTFAGNTPLHLAA
GLGYPTLTRLLLKAGADIHAENEEPLCPLPSPPTSDSDSDSEGPEKDTRSSFRGHTPLDLTCSTLVKTLLNAAQ
NTMEPPLTPPSPAGPGLSLGDTALQNLEQLLDGPEAQGSWAELAERLGLRSLVDTYRQTTSPSGSLLRSYELAGG
DLAGLLEALSDMGLEEGVRLLRGPETRDKLPSTEVKEDSAYGSQSVEQEAEKLGPPPEPPGGLSHGHPQPQVTDL

897/2682 FIGURE 826

GGGGTGGGAAGAGCTGAAGCAGGCGCTCTTGGCTCGGCGCCGCCGCTGCAATCCGTGGAGGAACGCGCCGCCG AGCCACCATCATGCCTGGGCACTTACAGGAAGGCTTCGGCTGCGTGGTCACCAACCGATTCGACCAGTTATTTGA GGGCCCTGGGGCCAAGAGCGCAGCTCAGGCCGCGGCCCAGACCCAACTCCAACGCGGCAAACAGCTGCGCAA GCCCGTGGCGCTTAAGAAAGAAGGAATAAGACGAGTTGGAAGAAGACCTGATCAACAACTTCAGGGTGAAGGGAA AATAATTGATAGAAGACCAGAAAGGCGACCACCTCGTGAACGAAGATTCGAAAAGCCACTTGAAGAAAAGGGGTGA AGGGGGCCGTGGACGTGGAATGGGCCGAGGAGATGGATTTGATTCTCGTGGCAAACGTGAATTTGATAGGCATAG TGGAAGTGATAGATCTGGCCTGAAĠCACGAGGACAAACGTGGAGGTAGCGGATCTCACAACTGGGGAACTGTCAA AGACGAATTAACTGACTTGGATCAATCAAATGTGACTGAGGAAACACCTGAAGGTGAAGAACATCATCCAGTGGC GAAGGCTATTCAAAATAAGGACCGGGCAAAAGTAGAATTTAATATCCGAAAACCAAATGAAGGTGCTGATGGGCA GTGGAAGAAGGGATTTGTTCTTCATAAATCAAAGAGTGAAGAGGCTCATGCTGAAGATTCGGTTATGGACCATCA TTTCCGGAAGCCAGCAAATGATATAACGTCTCAGCTGGAGATCAATTTTGGAGACCTTGGCCGCCCAGGACGTGG CGGCAGGGGAGGACGAGGTGGGCGTGGTGGGCGCCCAAACCGTGGCAGCAGGACCGACAAGTCAAGTGC $\tt TTCTGCTCCTGATGTGGATGACCCAGAGGCATTCCCAGCTCTGGCT\\ \underline{TAAC} \texttt{TTGGATGCCATAAGACAACCCTGGTT}$ ACTGTCATTCATACCATTCACACCTAAAGACTGAATTTTATCTGTTTTAAAAATGAACTTCTCCCGCTACACAGA AGTAACAAATATGGTAGTCAGTTTTGTATTTAGAAATGTATTGGTAGCAGGGATGTTTTCATAATTTTCAGAGAT TATGCATTCTTCATGAATACTTTTGTATTGCTGCTTGCAAATATGCATTTCCAAACTTGAAATATAGGTGTGAAC CTGGTTTTAAATATTGGACATACTGGTTTTAATACCTGCTTTGCATATTCACACATGGTCAACTGGGACATGTTA TCAGTACTTGAACAAATTCAAAGCACATTTGGTTTATTAACCCTTGCTCCTTGCATGGCTCATTAGGTTCAAATT ATAACTAATTTACATTTTCAGCTATATTTACTTTTTAAATGCTTGAGTTTCCCATTTTAAAATCTAAACTAGACA TCTTAATTGGTGAAAGTTGTTTAAACTACTTATTGTTGGTAGGCACATCGTGTCAAGTGAAGTAGTTTTATAGGT ATGGGTTTTTTCTCCCCCTTCACCAGGGTGGGTGGAATAAGTTGATTTGGCCAATGTGTAATATTTAAACTGTTC TGTAAAATAAAAAAAAAAAAAAAAAA

898/2682 FIGURE 827

MPGHLQEGFGCVVTNRFDQLFDDESDPFEVLKAAENKKKEAGGGGVGGPGAKSAAQAAAQTNSNAAGKQLRKESQ KDRKNPLPPSVGVVDKKEETQPPVALKKEGIRRVGRRPDQQLQGEGKIIDRRPERRPPRERRFEKPLEEKGEGGE FSVDRPIIDRPIRGRGGLGRGRGGRGMGRGDGFDSRGKREFDRHSGSDRSGLKHEDKRGGSGSHNWGTVKDEL TDLDQSNVTEETPEGEEHHPVADTENKENEVEEVKEEGPKEMTLDEWKAIQNKDRAKVEFNIRKPNEGADGQWKK GFVLHKSKSEEAHAEDSVMDHHFRKPANDITSQLEINFGDLGRPGRGGRGGRGGRGGRGGRPNRGSRTDKSSASAP DVDDPEAFPALA

899/2682 FIGURE 828

900/2682 FIGURE 829

MMTKHKKCFIIVGVLITTNIITLIVKLTRDSQSLCPYDWIGFQNKCYYFSKEEGDWNSSKYNCSTQHADLTIIDN IEEMNFLRRYKCSSDHWIGLKMAKNRTGQWVHGATFTKSFGMRGSEGCAYLSDDGAATARCYTERKWICRKRIH

901/2682 FIGURE 830

 $\tt CTGAAGCTTGCATGCCTGCAGGTCGACCCACGCGTCCGCGGACGCGTGGGCGGACGCGTGGGTTTTTCCTTTCTT$ GAGGGGAATGCTAAGAGGTGATTTTCAATGTTGGGACTCAAAGGTGAAGACACTGAAGGACAGAATTTTTGGCAG AGGAAAGATCTTCTTCGGTCACCATACTTGAGTTAGCTCTAGGGAAGTGGAGGTTTCCATTTGGAATTCTATAGC ${\tt TTCTTCCAGGTCATAGTGTCTGCCCCCCACCTTCCAGTATCTCCTGATATGCAGCATGA{\tt ATG}{\tt AAAATGGCAAGTT}}$ CGACCATGAGTGCAGAGCCATGGAGCTGAAGTGGGTGAGTTCCAGCCTAAGGCAGGTGGTGAACGTGTATGCAG ATGGAAAGGAAGTGGAAGACAGGCAGAGTGCACCGTATCGAGGGAGAACTTCGATTCTGCGGGATGGCATCACTG CAGGGAAGGCTGCTCTCCGAATACACAACGTCACAGCCTCTGACAGTGGAAAGTACTTGTGTTATTTCCAAGATG GTGACTTCTATGAAAAAGCCCTGGTGGAGCTGAAGGTTGCAGCACTGGGTTCTGATCTTCACGTTGATGTGAAGG ACAACAAGGGAGAACATCCCGACTGTGGAAGCACCTGTGGTTGCAGACGGAGTGGGCCTGTATGCAGTAGCAG CATCTGTGATCATGAGAGGCAGCTCTGGGGAGGGTGTATCCTGTACCATCAGAAGTTCCCTCCTCGGCCTGGAAA AGACAGCCAGCATTTCCATCGCAGACCCCTTCTTCAGGAGCGCCCAGAGGTGGATCGCCGCCCTGGCACGGACCC TCAGAAAGAAAAAGAGAGAGCAAGAGTTGAGAGAAAATGGCATGGAGCACAATGAAGCAAAAAGCACAAGAG AATGGAAAAAGGCCCTCTTCAAGCCTGCGGATGTGATTCTGGATCCAAAAACAGCAAACCCCATCCTCCTTGTTT CTGAGGACCAGAGGAGTGTGCAGCGTGCCAAGGAGCCCCAGGATCTGCCAGACAACCCTGAGAGATTTAATTGGC ATTATTGTGTTCTCGGCTGTGAGAGCTTCATATCAGGGAGACATTACTGGGAGGTGGAGGTAGGGGACAGGAAAG AGTGGCATATAGGGGTGTGCAGTAAGAATGTGCAGAGAAAAGGCTGGGTCAAAATGACACCTGAGAATGGATTCT ATATTCATACTTTCCTGGACGTCTCCTTCTCTGAGGCTCTATATCCTGTTTTCAGAATTTTGACCTTGGAGCCCA $\tt CGGCCCTGAGTATTTGTCCAGCG{\color{red}{TGA}} AAAGAAGAAGAGAGTTCCTCCAATTCTGACCGAGTGCTGATCATTCCCT$ AGAGACACCAGTAACCCCGGGCTTAGCTAACGAAAGTGGGGAGCCTCAGGCTGAAGTAACTTTTCTCTGCTTCTC AAGCACTTTACTGATACTCATTCAATTATTCATATGACAGTTGTTTGAGTTTGGTACCATCTTATTTTCCCCTTA TACAGATAAGGAAACTGGGGTGCAGAAAAGTGAATTGACTACAAAGTAGACATGACTAGTTAACAACACAGCTGG GATCTAAACAGCAATAACTAACATTAATGGAGAACTTAAAATGCTCTGAGTGCTGTGTTATGAGCTTTGGTGGAT GTCACTCCTTTAATCCTCGCAACACCCTGTCGGGTAGTCTCATTTAGCAAGTATGGAAGTTGAGGCAGGGCAACA TTAAGCAACTTACATAACTCATGCAGTAATTTCTGCAGTTGGGAGATGTTCAGCTTCAGTCCCCGGCCCTATGGC CGTTCTTTTCCACCCTGTTTCTTCCCCCATAGGAAGAACCCACCTGTAGCCCTGAGGTTCTTTTCCCAGGATGGC TCCAGGATAAGGATCACTGTAGGTGGTTGTGGAGTTGACACCCCTGTTGACTCCTTCCCAGCTGATTGTCAGAGC CTTAGACCCAGCACGCCTTGGATTAGCTTTGCAGAGTGTCTTGGTTGAGAGAATAACCTCACCGTACCCACATGA CACGTGATTTGGAAAGAGACTAGAGGCCACACTTGATAAATCATGGGGAACAGATGTGTTCCACCCAACAAATGT TTACTCTGTTGCTAGGCTGGAGTGCAGTGGTGCGATCTCAGCTCCCTGCAACCTCCACCTCCTGGGTTCAAACAA TTCTCCTGCCTCAGCCTCCCGAGTACTGGGAATATAGGTGCACGCCACCACCCAACAAATTTTTGTACTTTTA CCAAAGTGCTGGGATTACAGGCTTGAGCCACCGGGTGACCGGCTTACAGGGATATTTTTAATCCCGTTATGGACT CTGTCTCCAGGAGAGGGGTCTATCCACCCCTGCTCATTGGTGGATGTTAAACCAATATTCCTTTCAACTGCTGCC TGCTAGGGAAAACTACTCCTCATTATCATCATTATTATTGCTCTCCACTGTATCCCCTCTACCTGGCATGTGCT

AΑ

902/2682 FIGURE 831

MKMASFLAFLLLNFRVCLLLLQLLMPHSAQFSVLGPSGPILAMVGEDADLPCHLFPTMSAETMELKWVSSSLRQV VNVYADGKEVEDRQSAPYRGRTSILRDGITAGKAALRIHNVTASDSGKYLCYFQDGDFYEKALVELKVAALGSDL HVDVKGYKDGGIHLECRSTGWYPQPQIQWSNNKGENIPTVEAPVVADGVGLYAVAASVIMRGSSGEGVSCTIRSS LLGLEKTASISIADPFFRSAQRWIAALARTLPVLLLLLGGAGYFLWQQQEEKKTQFRKKKREQELREMAWSTMKQ EQSTRVKLLEELRWRSIQYASRGERHSAYNEWKKALFKPADVILDPKTANPILLVSEDQRSVQRAKEPQDLPDNP ERFNWHYCVLGCESFISGRHYWEVEVGDRKEWHIGVCSKNVQRKGWVKMTPENGFWTMGLTDGNKYRTLTEPRTN LKLPKPPKKVGVFLDYETGDISFYNAVDGSHIHTFLDVSFSEALYPVFRILTLEPTALSICPA

903/2682 FIGURE 832

904/2682 FIGURE 833

MARATLSAAPSNPRLLRVALLLLLLVAASRRAAGAPLATELRCQCLQTLQGIHLKNIQSVKVKSPGPHCAQTEVI ATLKNGQKACLNPASPMVKKIIEKMLKNGKSN

905/2682 FIGURE 834

CAAATCCGTGCTCCTAGATTTGCAGGTTCTGATACTGTGGTTCGAGCTACACTCGCCGCCTGGGCAGACACTCGT CCAAACCACTGGAGTGTGCTGGTGATCGCAGCCAGCCCTTCGCCTCTCCATGAACCCGTGAGCCTGGGGCAGGTG TGGCGGGGGAGCGCTGCTTGGGTTGCGGAGCCTTCTGCAGGGGACCAGCAAGCCCAAAGAGCCCAGCTGTCT $\verb|CCTGAAGGAAAAGGAGCGCCAAGGCCTGCCTGCAGCCACAACCCCTGGGCCAGGCCTGGAGACTGCGGGCCC|\\$ GGCGGATGCCCCGGCTGGGGCAGTGGTGGGCGGAGGGTCCCCGCGGGGCCCCGGGGCCCGGGGCCCCCGGG TCTGTTGGCGCCACTGCTGTGGGAGCGCACGCTGCCGTTCGGCGATGTGGAGTACGTAGACCTGGACGCCTTCCT GCTGGAGCACGGGCTCCCGCCCAGCCCGCCCCCCGGTGGCCCGTCGCCGGAGCCGTCGCCCGCGCGCACGCC CGTGGAGGTGTTGATGACCTTTGAACCCGACCCAGCTGATCTTGCCCTATCAAGCATTCCTGGCCACGAGACCTT TGACCCTCGAAGACATCGCTTCTCAGAAGAGGAACTTAAGCCCCAGCCAATCATGAAGAAGGCAAGAAAAATCCA GGTGCCGGAGGAGCAGAAGGATGAGAAATACTGGAGCCGGCGGTACAAGAACAACGAGGCAGCCAAGCGGTCCCG GCAGGAAGTTGTGGCCGTGCCCAGGAGCTGTCCCACTACCGCGCCGTGCTGTCCCGATACCAGGCCCAGCACGG $\mathsf{GGCCCTG}$ $\mathsf{\underline{TGA}}$ $\mathsf{GGCCCCACCTGGCAGGCGTCTCCTCCGCTTGCTGAGACTTACGCCCTGTTCCCT$ TCCTGCCCTGTGCCCACGGGCCGGCCAGCTGGGTGCCCCAGGGACGTGATAATGCAGATAAATACATTTATATTT CTATCCTCCCACCGCCTCCGTTAACACGATCCTGAATAAATCTTGAGAACCCC

906/2682 FIGURE 835

MARPVSDRTPAPLLLGGPAGTPPGGGALLGLRSLLQGTSKPKEPASCLLKEKERKAALPAATTPGPGLETAGPAD APAGAVVGGGSPRGRPGPVPAPGLLAPLLWERTLPFGDVEYVDLDAFLLEHGLPPSPPPPGGPSPEPSPARTPAP SPGPGSCGSASPRSSPGHAPARAALGTATGHRAGLTSRDTPSPVDPDTVEVLMTFEPDPADLALSSIPGHETFDP RRHRFSEEELKPQPIMKKARKIQVPEEQKDEKYWSRRYKNNEAAKRSRDARRLKENQISVRAAFLEKENALLRQE VVAVRQELSHYRAVLSRYQAQHGAL

907/2682 FIGURE 836

AGACTCAACAAGAGCTCCAGCAAAGACTTTCACTGTAGCTTGACTTGACCTGAGATTAACTAGGGAATCTTGAGA ATAAAGATGAGCTCTGAAAATTGTTTCGTAGCAGAGAACAGCTCTTTGCATCCGGAGAGTGGACAAGAAAATGAT GTCTTCATCACCATTTTAATCATAGCTCTCATTGCCTTATCAGTGGGCCAATACAATTGTCCAGGCCAATACACA TTCTCAATGCCATCAGACAGCCATGTTTCTTCATGCTCTGAGGACTGGGTTGGCTACCAGAGGAAATGCTACTTT ATTTCTACTGTGAAGAGGAGCTGGACTTCAGCCCAAAATGCTTGTTCTGAACATGGTGCTACTCTTGCTGTCATT GATTCTGAAAAGGACATGAACTTTCTAAAACGATACGCAGGTAGAGAGGAACACTGGGTTGGACTGAAAAAAGGAA CCTGGTCACCCATGGAAGTGGTCAAATGGCAAAGAATTTAACAACTGGTTCAACGTTACAGGGTCTGACAAGTGT GTTTTTCTGAAAAACACAGAGGTCAGCAGGATGGAATGTGAGAAGAATTTATACTGGATATGTAACAAACCTTAC AAATAATAAGGAAACATGTTCACTTATTGACTATTATAGAATGGAACTCAAGGAAATCTGTGTCAGTGGATGCTG AGAACTATGGAAAAAAGGAAGAAATTCCAGGAAAATCTGCACTGTGGGCTTTTATTGCCATGAGCTAGAAGCAT CACAGGTTGACCAATAACCATGCCCAAGAATGAGAAGAATGACTATGCAACCTTTGGATGCACTTTATATTATTT TTCATGCATTTGCACTACTGGAAGGAGTTAGATGTTGGTACTAGATACTGAATGTAAACAAAGGAATTATGGCTG GTAACATAGGTTTTTAGTCTAATTGAATCCCTTAAACTCAGGGAGCATTTATAAATGGACAAATGCTTATGAAAC TAAGATTTGTAATATTTCTCTCTTTTTAGAGAAATTTGCCAATTTACTTTGTTATTTTTCCCCAAAAAGAATGGG ATGATCGTGTATTTATTTTTTTTTTCTTCCTCAGCTGTAGACAGGTCCTTTTCGATGGTACATATTTCTTTGCCTTT ATAATCTTTTATACAGTGTCTTACAGAGAAAAGACATAAGCAAAGACTATGAGGAATATTTGCAAGACATAGAAT AGTGTTGGAAAATGTGCAATATGTGATGTGGCAAATCTCTATTAGGAAATATTCTGTAATCTTCAGACCTAGAAT AATACTAGTCTTATAATAGGTTTGTGACTTTCCTAAATCAATTCTATTACGTGCAATACTTCAATACTTCATTTA AAATATTTTTATGTGCAATAAAATGTATTTGTTTTGTATTTTGTGTTCAGTACAATTATAAGCTGTTTTTATATAT

908/2682 FIGURE 837

MSSENCFVAENSSLHPESGQENDATSPHFSTRHEGSFQVPVLCAVMNVVFITILIIALIALSVGQYNCPGQYTFS MPSDSHVSSCSEDWVGYQRKCYFISTVKRSWTSAQNACSEHGATLAVIDSEKDMNFLKRYAGREEHWVGLKKEPG HPWKWSNGKEFNNWFNVTGSDKCVFLKNTEVSSMECEKNLYWICNKPYK

909/2682 FIGURE 838

910/2682 FIGURE 839

 ${\tt MQMFPPSPLFFFLQLLKQSSRRLEHTFVFLRNFSLMLLRYIGKKRRATRFWDPRRGTP}$

911/2682 FIGURE 840

GGCTCCTTCGGGAAACCCAGCCCCGTCACCGGGCTCCGAGCGGCTCGCAGCCGAGCGACAGCGGCCTCAGCCCCG CAACGGCGGCGAGCCCTTCCTTATAGGCGTCAGCGGGGGAACAGCTAGCGGCAAGTCTTCCGTGTGTGCTAAGAT CGTGCAGCTCCTGGGGCAGAATGAGGTGGACTATCGCCAGAAGCAGGTGGTCATCCTGAGCCAGGATAGCTTCTA CCGTGTCCTTACCTCGGAGCAGAAGGCCAAAGCCCTGAAGGGCCAGTTCAACTTTGACCACCCGGATGCCTTTGA CAATGAACTCATTCTCAAAACACTCAAAGAAATCACTGAAGGGAAAACAGTCCAGATCCCCGTGTATGACTTTGT CTCCCATTCCCGGAAGGAGGAGACAGTTACTGTCTATCCCGCAGACGTGGTGCTCTTTGAAGGGATCCTGGCCTT CTACTCCCAGGAGGTACGAGACCTGTTCCAGATGAAGCTTTTTGTGGATACAGATGCGGACACCCGGCTCTCACG CAGAGTATTAAGGGACATCAGCGAGAGAGGCAGGGATCTTGAGCAGATTTTATCTCAGTACATTACGTTCGTCAA GCCTGCCTTTGAGGAATTCTGCTTGCCAACAAAGAAGTATGCTGATGTGATCATCCCTAGAGGTGCAGATAATCT GGTGGCCATCAACCTCATCGTGCAGCACCATCCAGGACATCCTGAATGGAGGGCCCTCCAAACGGCAGACCAATGG GAACGACAAAATGAAACAGAACTTGACCCTGAGCTTAAATAACAAAACTGTGCCAACTACTACTGGTGATGCCTA AAAAAAAA

912/2682 FIGURE 841

MAGDSEQTLQNHQQPNGGEPFLIGVSGGTASGKSSVCAKIVQLLGQNEVDYRQKQVVILSQDSFYRVLTSEQKAK ALKGQFNFDHPDAFDNELILKTLKEITEGKTVQIPVYDFVSHSRKEETVTVYPADVVLFEGILAFYSQEVRDLFQ MKLFVDTDADTRLSRRVLRDISERGRDLEQILSQYITFVKPAFEEFCLPTKKYADVIIPRGADNLVAINLIVQHI QDILNGGPSKRQTNGCLNGYTPSRKRQASESSSRPH

913/2682 FIGURE 842

CTTTCTCCCCACTAGTTTACACCACAGGAAGCGAGAGAGCTGCTGCCACTGCTGCTACCACAGGAAGACACAGCA GGGAGAAGCCCTAGTGCCTCTGCCGGCTGCCCAGGACCTGGTATCGGCCCACAGACCAAGTCCTCCACAGAGGGC CGGATGGACTATAGCTTTGATACCACAGCCGAAGACCCTTGGGTTAGGATTTCTGACTGCATCAAAAACTTATTT CAGGGCCACCCAGATGGGACCCCACCAAAGCTGGACACCGCCAATGGCACTCCCAAAGTTTACAAGTCAGCAGAC CTAGGATCACACATCCGGGCCTCCTCCTCCTCCTCCATCAGGCAGAGAATCAGCTCCTTTGAAACCTTTGGC TCCTCTCAACTGCCTGACAAAGGAGCCCAGAGACTGAGCCTCCAGCCCTCCTCTGGGGGAGGCAAAAACCTCTT GGGAAGCATGAGGAAGGACGGTTTTCTGGACTCTTGGGGCGAGGGGCTGCACCCACTCTTGTGCCCCAGCAGCCT GAGCAAGTACTGTCCTCGGGGTCCCCTGCAGCCTCCGAGGCCAGAGACCCAGGTGTGTCTGAGTCCCCTCCCCCA GGGCGGCAGCCCAATCAGAAAACTTTCCCCCCTGGCCCGGACCCGCTCCTAAGGCTGCTGTCAACACAGGCTGAG GAATCTCAAGGCCCAGTGCTCAAGATGCCTAGCCAGCGAGCACGGAGCTTCCCCCTGACCAGGTCCCAGTCCTGT GAGACGAAGCTACTTGACGAAAAGACCAGCAAACTCTATTCTATCAGCAGCCAAGTGTCATCGGCTGTCATGAAA TCCTTGCTGTGCCTTCCATCTTCTATCTCCTGTGCCCAGACTCCCTGCATCCCCAAGGCAGGGGCATCTCCAACA TCATCATCCAACGAAGACTCAGCTGCAAATGGTTCTGCTGAAACATCTGCCTTGGACACGGGGTTCTCGCTCAAC CTTTCAGAGCTGAGAGAATATACAGAGGGTCTCACGGAAGCCAAGGAAGACGATGATGGGGACCACAGTTCCCTT CAGTCTGGTCAGTCCGTTATCTCCCTGCTGAGCTCAGAAGAATTAAAAAAACTCATCGAGGAGGTGAAGGTTCTG GATGAAGCAACATTAAAGCAATTAGACGGCATCCATGTCACCATCTTACACAAGGAGGAAGGTGCTGGTCTTGGG TTCAGCTTGGCAGGAGGAGCAGATCTAGAAAACAAGGTGATTACGGTTCACAGAGTGTTTCCAAATGGGCTGGCC TCCCAGGAAGGGACTATTCAGAAGGGCAATGAGGTTCTTTCCATCAACGGCAAGTCTCTCAAGGGGACCACGCAC CATGATGCCTTGGCCATCCTCCGCCAAGCTCGAGAGCCCAGGCAAGCTGTGATTGTCACAAGGAAGCTGACTCCA GAGGCCATGCCCGACCTCAACTCCTCCACTGACTCTGCAGCCTCAGCCTCTGCAGCCAGTGATGTTTCTGTAGAA TCTACAGCAGAGGCCACAGTCTGCACGGTGACACTGGAGAAGATGTCGGCAGGGCTGGGCTTCAGCCTGGAAGGA GGGAAGGGCTCCCTACACGGAGACAAGCCTCTCACCATTAACAGGATTTTCAAAGGAGCAGCCTCAGAACAAAGT GAGACAGTCCAGCCTGGAGATGAAATCTTGCAGCTGGGTGGCACTGCCATGCAGGGCCTCACACGGTTTGAAGCC TGGAACATCATCAAGGCACTGCCTGATGGACCTGTCACGATTGTCATCAGGAGAAAAAGCCTCCAGTCCAAGGAA $\mathtt{ACCACAGCTGCTGGAGACTCC}$ CTGCTGCCCAGGCCCAGACCTTCTAGGACGCCACCCAGCAAAAGGTTGTTCCTAAAATAAGGGCAGAGTCACACT GGGGCAGCTGATACAAATTGCAGACTGTGTAAAAAGAGAGCTTAATGATAATATTGTGGTGCCACAAATAAAATG GATTTATTAGAATTCCATATGACATTCATGCCTGGCTTCGCAAAATGTTTCAAGTACTGTAACTGTGTCATGATT CACCCCAAACAGTGACATTTATTTTTCTCATGAATCTGCAATGTGGGCAGAGTTGGAATGGGCAGCTCATCTC TGTCCCACTTGGCATCAGCTGGCGTCATGCAAAGTCATGCAAAGGCTGGGACCACCTGAGATCATTCACTCATAC ATCTGGCCGTTGATGTTGGCTGGGAACTCACCTGGGGCTGCTGGCCTGAATGCTTATAGGTGGCCTCTCCTTGTG GCCTGGGCTCCTCACAACATGGTGTCTGGATTCCCAGGATGAGCATCCCAGGATCGCAAGAGCCACGTAGAAGCT GCATCTTGTTTATACCTTTGCCTTGGAAGTTGCATGGCATCACCTCCACCATACTCCATCAGTTAGAGCTGACAC AAACCTGCCTGGGTTTAAGGGGAGAGGAAATATTGCTGGGGTCATTTATGAAAAATACAGTTTGTCACATGAAAC ATTTGCAAAATTGTTTTTGGTTGGATTGGAGAAGTAATCCTAGGGAAGGGTGGTGGAGCCAGTAAATAGAGGAGT ACAGGTGAAGCACCAAGCTCAAAGCGTGGACAGGTGTGCCGACAGAAGGAACCAGCGTGTATATGAGGGTATCAA ATAAAATTGCTACTACTTACCTACC

914/2682 FIGURE 843

MDYSFDTTAEDPWVRISDCIKNLFSPIMSENHGHMPLQPNASLNEEEGTQGHPDGTPPKLDTANGTPKVYKSADS STVKKGPPVAPKPAWFRQSLKGLRNRASEPRGLPDPALSTQPAPASREHLGSHIRASSSSSSIRQRISSFETFGS SQLPDKGAQRLSLQPSSGEAAKPLGKHEEGRFSGLLGRGAAPTLVPQQPEQVLSSGSPAASEARDPGVSESPPPG RQPNQKTFPPGPDPLLRLLSTQAEESQGPVLKMPSQRARSFPLTRSQSCETKLLDEKTSKLYSISSQVSSAVMKS LLCLPSSISCAQTPCIPKAGASPTSSNEDSAANGSAETSALDTGFSLNLSELREYTEGLTEAKEDDDGDHSSLQ SGQSVISLLSSEELKKLIEEVKVLDEATLKQLDGIHVTILHKEEGAGLGFSLAGGADLENKVITVHRVFPNGLAS QEGTIQKGNEVLSINGKSLKGTTHHDALAILRQAREPRQAVIVTRKLTPEAMPDLNSSTDSAASASAASDVSVES TAEATVCTVTLEKMSAGLGFSLEGGKGSLHGDKPLTINRIFKGAASEQSETVQPGDEILQLGGTAMQGLTRFEAW NIIKALPDGPVTIVIRRKSLQSKETTAAGDS

915/2682 FIGURE 844

CTTTCTCCCCACTAGTTTACACCACAGGAAGCGAGAGAGCTGCTGCCACTGCTACCACAGGAAGACACAGCA GGGAGAAGCCCTAGTGCCTCTGCCGGCTGCCCAGGACCTGGTATCGGCCCACAGACCAAGTCCTCCACAGAGGGC CGGATGCACTATAGCTTTGATACCACAGCCGAAGACCCTTGGGTTAGGATTTCTGACTGCATCAAAAACTTATTT CAGGGCCACCAGATGGGACCCCACCAAAGCTGGACACCGCCAATGGCACTCCCAAAGTTTACAAGTCAGCAGAC CTAGGATCACACATCCGGGCCTCCTCCTCCTCCTCCATCAGGCAGAAATCAGCTCCTTTGAAACCTTTGGC TCCTCTCAACTGCCTGACAAAGGAGCCCAGAGACTGAGCCTCCAGCCCTCCTCTGGGGAGGCAGAAAACCTCTT GGGAAGCATGAGGAAGGACGGTTTTCTGGACTCTTGGGGCGAGGGGCTGCACCCACTCTTGTGCCCCAGCAGCCT GAGCAAGTACTGTCCTCGGGGTCCCCTGCAGCCTCCGAGGCCAGAGACCCAGGTGTGTCTGAGTCCCCTCCCCCA GGGCGGCAGCCCAATCAGAAAACTTTCCCCCCTGGCCCGGACCCGCTCCTAAGGCTGCTGTCAACACAGGCTGAG GAATCTCAAGGCCCAGTGCTCAAGATGCCTAGCCAGCGAGCACGAGCTTCCCCCTGACCAGGTCCCAGTCCTGT GAGACGAAGCTACTTGACGAAAAGACCAGCAAACTCTATTCTATCAGCAGCCAAGTGTCATCGGCTGTCATGAAA TCCTTGCTGTGCCTTCCATCTTCTATCTCCTGTGCCCAGACTCCCTGCATCCCCAAGGCAGGGGCATCTCCAACA TCATCATCCAACGAAGACTCAGCTGCAAATGGTTCTGCTGAAACATCTGCCTTGGACACGGGGTTCTCGCTCAAC CTTTCAGAGCTGAGAGAATATACAGAGGGTCTCACGGAAGCCAAGGAAGACGATGATGGGGACCACAGTTCCCTT CAGTCTGGTCAGTCCGTTATCTCCCTGCTGAGCTCAGAAGAATTAAAAAAACTCATCGAGGAGGTGAAGGTTCTG GATGAAGCAACATTAAAGCAATTAGACGGCATCCATGTCACCATCTTACACAAGGAGGAAGGTGCTGGTCTTGGG TTCAGCTTGGCAGGAGGAGCAGATCTAGAAAACAAGGTGATTACGGTTCACAGAGTGTTTCCAAATGGGCTGGCC TCCCAGGAAGGGACTATTCAGAAGGGCAATGAGGTTCTTTCCATCAACGGCAAGTCTCTCAAGGGGACCACGCAC CATGATGCCTTGGCCATCCTCCGCCAAGCTCGAGAGCCCAGGCAAGCTGTGATTGTCACAAGGAAGCTGACTCCA GAGGCCATGCCCGACCTCAACTCCTCCACTGACTCTGCAGCCTCAGCCTCTGCAGCCAGTGATGTTTCTGTAGAA TCTACAGCAGAGGCCACAGTCTGCACGGTGACACTGGAGAAGATGTCGGCAGGGCTGGGCTTCAGCCTGGAAGGA GGGAAGGGCTCCCTACACGGAGACAAGCCTCTCACCATTAACAGGATTTTCAAAGGAGCAGCCTCAGAACAAAGT GAGACAGTCCAGCCTGGAGATGAAATCTTGCAGCTGGGTGGCACTGCCATGCAGGGCCTCACACGGTTTGAAGCC TGGAACATCATCAAGGCACTGCCTGATGGACCTGTCACGATTGTCATCAGGAGAAAAAGCCTCCAGTCCAAGGAA ${\tt ACCACAGCTGCTGGAGACTCC}{{\tt TAG}{\tt GCAGGACATGCTGAAGCCAAAGCCAATAACACACAGCTAACACACAGCTCC}$ CTGCTGCCCAGGCCCAGACCTTCTAGGACGCCACCCAGCAAAAGGTTGTTCCTAAAATAAGGGCAGAGTCACACT GGGGCAGCTGATACAAATTGCAGACTGTGTAAAAAGAGAGCTTAATGATAATATTGTGGTGCCACAAATAAAATG GATTTATTAGAATTCCATATGACATTCATGCCTGGCTTCGCAAAATGTTTCAAGTACTGTAACTGTGTCATGATT CACCCCAAACAGTGACATTTATTTTCTCATGAATCTGCAATGTGGGCAGAGATTGGAATGGGCAGCTCATCTC TGTCCCACTTGGCATCAGCTGGCGTCATGCAAAGTCATGCAAAGGCTGGGACCACCTGAGATCATTCACTCATAC ATCTGGCCGTTGATGTTGGCTGGGAACTCACCTGGGGCTGGCCTGAATGCTTATAGGTGGCCTCTCCTTGTG GCCTGGGCTCCTCACAACATGGTGTCTGGATTCCCAGGATGAGCATCCCAGGATCGCAAGAGCCACGTAGAAGCT GCATCTTGTTTATACCTTTGCCTTGGAAGTTGCATGGCATCACCTCCACCATACTCCATCAGTTAGAGCTGACAC AAACCTGCCTGGGTTTAAGGGGAGAGGAAATATTGCTGGGGTCATTTATGAAAAATACAGTTTGTCACATGAAAC ATTTGCAAAATTGTTTTTGGTTGGATTGGAGAAGTAATCCTAGGGAAGGGTGGTGGAGCCAGTAAATAGAGGAGT ACAGGTGAAGCACCAAGCTCAAAGCGTGGACAGGTGTGCCGACAGAAGGAACCAGCGTGTATATGAGGGTATCAA ATAAAATTGCTACTACTTACCTACC

916/2682 FIGURE 845

MDYSFDTTAEDPWVRISDCIKNLFSPIMSENHGHMPLQPNASLNEEEGTQGHPDGTPPKLDTANGTPKVYKSADS STVKKGPPVAPKPAWFRQSLKGLRNRASEPRGLPDPALSTQPAPASREHLGSHIRASSSSSSIRQRISSFETFGS SQLPDKGAQRLSLQPSSGEAAKPLGKHEEGRFSGLLGRGAAPTLVPQQPEQVLSSGSPAASEARDPGVSESPPPG RQPNQKTFPPGPDPLLRLLSTQAEESQGPVLKMPSQRARSFPLTRSQSCETKLLDEKTSKLYSISSQVSSAVMKS LLCLPSSISCAQTPCIPKAGASPTSSSNEDSAANGSAETSALDTGFSLNLSELREYTEGLTEAKEDDDGDHSSLQ SGQSVISLLSSEELKKLIEEVKVLDEATLKQLDGIHVTILHKEEGAGLGFSLAGGADLENKVITVHRVFPNGLAS QEGTIQKGNEVLSINGKSLKGTTHHDALAILRQAREPRQAVIVTRKLTPEAMPDLNSSTDSAASASAASDVSVES TAEATVCTVTLEKMSAGLGFSLEGGKGSLHGDKPLTINRIFKGAASEQSETVQPGDEILQLGGTAMQGLTRFEAW NIIKALPDGPVTIVIRRKSLQSKETTAAGDS

917/2682 FIGURE 846

AAGCAGTGGTAACAACGCAGAGTACGCGGGAAGCAGTGGTAACAACGCAGAGTACGCGGGAAGCAGTGGTAACAA
CGCAGAGTACGCGGGAAGCAGTGGTAACAACGCAGAGTACGCGGGAAGCAGTGGTAACAACGCAGAGTACGCGGG
GCCAGCGGAAGTGGCTCCTGTAAGGCAGCAAGGTAGCGTGGCCGGCGCCCGAGCTGGGGTTGTGTCCCTGCTGGG
CTGCCGTTCCAGCTGGACTGCCGCCATGGAACTCAGCGCCGAATACCTCCGCGAGAAGCTGCAGCGGGACCTGGA
GGCGGAGCATGTGGAGGTGGAGGACACGACCCTCAACCGTTGCTCCTGTAGCTTCCGAGTCCTGGTGGTGTCCGC
CAAGTTCGAGGGGAAACCGCTGCTTCAGAGACACAGGCTGGTGAACGCGTGCCTAGCAGAAAATGAGGGACCGCACAT
CCATGCCTTTGAACAGAAAACCCTGACCCCAGACCAGTGGGCACGTGAGCGACAGAAATGAGGGACTGGGATCTG
CACAGCCATTAAATTATAAATCTGGACG

918/2682 FIGURE 847

 ${\tt MELSAEYLREKLQRDLEAEHVEVEDTTLNRCSCSFRVLVVSAKFEGKPLLQRHRLVNACLAEELPHIHAFEQKTL}\\ {\tt TPDQWARERQK}$



TGACATTTTTGGACAATGCAATTGTGGCACTGGCACTTATTTCAGTGAAGAAAAACTTTGTGGTTCTATGGCATT TTAAGGGCCCATTACATTTCTGAAGAAGAAGCTAAGATGAAGGACATGCCACTCCGAATTCATGTGCTACTTGG CCTAGCTATCACTACACTAGTACAAGCTGTAGATAAAAAAGTGGATTGTCCACGGTTATGTACGTGTGAAATCAG GCCTTGGTTTACACCCAGATCCATTTATATGGAAGCATCTACAGTGGATTGTAATGATTTAGGTCTTTTAACTTT CCCAGCCAGATTGCCAGCTAACACACAGATTCTTCTCCTACAGACTAACAATATTGCAAAAATTGAATACTCCAC AGACTTTCCAGTAAACCTTACTGGCCTGGATTTATCTCAAAACAATTTATCTTCAGTCACCAATATTAATGTAAA ACTGAGCAACTTACAAGAACTCTATATTAATCACAACTTGCTTTCTACAATTTCACCTGGAGCCTTTATTGGCCT ACATAATCTTCTTCGACTTCATCTCAATTCAAATAGATTGCAGATGATCAACAGTAAGTGGTTTGATGCTCTTCC AAATCTAGAGATTCTGATGATTGGGGAAAATCCAATTATCAGAATCAAAGACATGAACTTTAAGCCTCTTATCAA AGAAAGCATCTCTTTTTACGATAACAGGCTTATTAAAGTACCCCATGTTGCTCTTCAAAAAGTTGTAAATCTCAA ATTTTTGGATCTAAATAAAAATCCTATTAATAGAATACGAAGGGGTGATTTTAGCAATATGCTACACTTAAAAGA GTTGGGGATAAATAATATGCCTGAGCTGATTTCCATCGATAGTCTTGCTGGGATAACCTGCCAGATTTAAGAAA AATAGAAGCTACTAACAACCCTAGATTGTCTTACATTCACCCCAATGCATTTTTCAGACTCCCCAAGCTGGAATC ACTCATGCTGAACAGCAATGCTCTCAGTGCCCTGTACCATGGTACCATTGAGTCTCTGCCAAACCTCAAGGAAAT CAGCATACACAGTAACCCCATCAGGTGTGACTGTGTCATCCGTTGGATGAACATGAACAAAACCAACATTCGATT CATGGAGCCAGATTCACTGTTTTGCGTGGACCCACCTGAATTCCAAGGTCAGAATGTTCGGCAAGTGCATTTCAG GGACATGATGGAAATTTGTCTCCCTCTTATAGCTCCTGAGAGCTTTCCTTCTAATCTAAATGTAGAAGCTGGGAG CTATGTTTCCTTTCACTGTAGAGCTACTGCAGAACCACAGCCTGAAATCTACTGGATAACACCTTCTGGTCAAAA ACTCTTGCCTAATACCCTGACAGACAAGTTCTATGTCCATTCTGAGGGAACACTAGATATAAATGGCGTAACTCC CAAAGAAGGGGGTTTATATACTTGTATAGCAACTAACCTAGTTGGCGCTGACTTGAAGTCTGTTATGATCAAAGT GGATGGATCTTTTCCACAAGATAACAATGGCTCTTTGAATATTAAAATAAGAGATATTCAGGCCAATTCAGTTTT GGTGTCCTGGAAAGCAAGTTCTAAAATTCTCAAATCTAGTGTTAAATGGACAGCCTTTGTCAAGACTGAAAATTC TCATGCTGCGCAAAGTGCTCGAATACCATCTGATGTCAAGGTATATAATCTTACTCATCTGAATCCATCAACTGA GTATAAAATTTGTATTGATATTCCCACCATCTATCAGAAAAACAGAAAAAATGTGTAAATGTCACCACCAAAGG TTTGCACCCTGATCAAAAAGAGTATGAAAAGAATAATACCACAACACTTATGGCCTGTCTTGGAGGCCTTCTGGG GATTATTGGTGTGATATGTCTTATCAGCTGCCTCTCTCCAGAAATGAACTGTGATGGTGGACACAGCTATGTGAG GAATTACTTACAGAAACCAACCTTTGCATTAGGTGAGCTTTATCCTCCTCTGATAAATCTCTGGGAAGCAGGAAA AGAAAAAAGTACATCACTGAAAGTAAAAGCAACTGTTATAGGTTTACCAACAAATATGTCC**TAA**AAACCACCAAG GAAACCTACTCCAAAAATGAACAAAAAAAAAAAAAAAAGCGAAAGACTGCAGTTGTGCTAAAAAACAAAACAAAACAA ATGGAAATATGTACAACTTCAGCATTTTAAGTAACTGGCTTCAAGGGGTACTGTGGCAACCAAATAAAATAACTC CATTTTCTAAAACTTTCATGTAACTTTTATGTCTGGACTACAGTTCAAGTGGACAAAAACATTTCTGTATTTTTT TTAAGTAAATAAGAGTAGTTGAACTGAGCAATACCTCCTCCTGTGTTGTATTACACATATTAGCCACGAGTTTTT GCAGTGACCAGATAAACTTGAATTGACACGTGGTGTAATAAAATGGACAAATTCTGTAGAGTAGACACAGTGAGT ATGTGGACCTCTTTTATAAGGAAAAATACATTTTGGATTAAAATCAATTGCTTCTGTCTTGTTTTGTTTCTAAAT AAAGAATAATTTCTGGGAAAAAAAAAAAAAAAAAAAA



MKDMPLRIHVLLGLAITTLVQAVDKKVDCPRLCTCEIRPWFTPRSIYMEASTVDCNDLGLLTFPARLPANTQILL LQTNNIAKIEYSTDFPVNLTGLDLSQNNLSSVTNINVKKMPQLLSVYLEENKLTELPEKCLSELSNLQELYINHN LLSTISPGAFIGLHNLLRLHLNSNRLQMINSKWFDALPNLEILMIGENPIIRIKDMNFKPLINLRSLVIAGINLT EIPDNALVGLENLESISFYDNRLIKVPHVALQKVVNLKFLDLNKNPINRIRRGDFSNMLHLKELGINNMPELISI DSLAVDNLPDLRKIEATNNPRLSYIHPNAFFRLPKLESLMLNSNALSALYHGTIESLPNLKEISIHSNPIRCDCV IRWMNMNKTNIRFMEPDSLFCVDPPEFQGQNVRQVHFRDMMEICLPLIAPESFPSNLNVEAGSYVSFHCRATAEP QPEIYWITPSGQKLLPNTLTDKFYVHSEGTLDINGVTPKEGGLYTCIATNLVGADLKSVMIKVDGSFPQDNNGSL NIKIRDIQANSVLVSWKASSKILKSSVKWTAFVKTENSHAAQSARIPSDVKVYNLTHLNPSTEYKICIDIPTIYQ KNRKKCVNVTTKGLHPDQKEYEKNNTTTLMACLGGLLGIIGVICLISCLSPEMNCDGGHSYVRNYLQKPTFALGE LYPPLINLWEAGKEKSTSLKVKATVIGLPTNMS



 ${\tt GCCACTTCTTCTGGGCCCACGAGGCAGCTGTCCCATGCTCTGAGCACGGTGGTGCC} {\tt ATGCCTCTGCAACTCC}$ TCCTGTTGCTGATCCTACTGGGCCCTGGCAACAGCTTGCAGCTGTGGGACACCTGGGCAGATGAAGCCGAGAAAG CCTTGGGTCCCCTGCTTGCCCGGGACCGGAGACAGGCCACCGAATATGAGTACCTAGATTATGATTTCCTGCCAG AAACGGAGCCTCCAGAAATGCTGAGGAACAGCACTGACACCACTCCTCTGACTGGGCCTGGAACCCCTGAGTCTA CCACTGTGGAGCCTGCTACAGGCGTTCTACTGGCCTGGATGCAGGAGGGGCAGTCACAGAGCTGACCACGGAGC TGGCCAACATGGGGAACCTGTCCACGGATTCAGCAGCTATGGAGATACAGACCACTCAACCAGCAGCCACGGAGG CACAGACCACTCCACTGGCAGCCACAGAGGCACAGACAACTCGACTGACGGCCACGGAGGCACAGACCACTCCAC TGGCAGCCACAGAGGCACAGACCACTCCACCAGCAGCCACGGAAGCACAGACCACTCAACCCACAGGCCTGGAGG CACAGACCACTGCACCAGCAGCCATGGAGGCACAGACCACTGCACCAGCAGCCATGGAAGCACAGACCACTCCAC CAGCAGCCATGGAGGCACAGACCACTCAAACCACAGCCATGGAGGCACAGACCACTGCACCAGAAGCCACGGAGG CACAGACCACTCAACCCACAGCCACGGAGGCACAGACCACTCCACTGGCAGCCATGGAGGCCCTGTCCACAGAAC CCAGTGCCACAGAGGCCCTGTCCATGGAACCTACTACCAAAAGAGGTCTGTTCATACCCTTTTCTGTGTCCTCTG TTACTCACAAGGGCATTCCCATGGCAGCCAGCAATTTGTCCGTCAACTACCCAGTGGGGGCCCCAGACCACATCT CTGTGAAGCAGTGCCTGGCCATCCTAATCTTGGCGCTGGTGGCCACTATCTTCTTCGTGTGCACTGTGGTGC TGGCGGTCCGCCTCTCCCGCAAGGGCCACATGTACCCCGTGCGTAATTACTCCCCCACCGAGATGGTCTGCATCT CATCCCTGTTGCCTGATGGGGGTGAGGGGCCCTCTGCCACAGCCAATGGGGGCCCTGTCCAAGGCCAAGAGCCCGG ${\tt GCCTGACGCCAGAGCCCAGGGAGGACCGTGAGGGGGGATGACCTCACCCTGCACAGCTTCCTCCCT} {\color{red}{\bf TAG}} {\tt CTCACTC}$ TGCCATCTGTTTTGGCAAGACCCCACCTCCACGGGCTCTCCTGGGCCACCCCTGAGTGCCCAGACCCCAATCCAC TTCAGCCGAGGTCCAAGGCAGGAGGCCATTTACTTGAGACAGATTCTCTCCTTTTTCCTGTCCCCCATCTTCTCT GGGTCCCTCTAACATCTCCCATGGCTCTCCCCGCTTCTCCTGGTCACTGGAGTCTCCTCCCCATGTACCCAAGGA AGATGGAGCTCCCCATCCCACACGCACTGCACTGCCATTGTCTTTTGGTTGCCATGGTCACCAAACAGGAAGTG GACATTCTAAGGGAGGAGTACTGAAGAGTGACGGACTTCTGAGGCTGTTTCCTGCTGCTCCTCTGACTTGGGGCA GCTTGGGTCTTCTTGGGCACCTCTCTGGGAAAACCCAGGGTGAGGTTCAGCCTGTGAGGGCTGGGATGGGTTTCG TGGGCCCAAAGGGCAGACCTTTCTTTGGGACTGTGTGGACCAAGGAGCTTCCATCTAGTGACAAGTGACCCCCAG CTATCGCCTCTTGCCTTCCCCTGTGGCCACTTTCCAGGGTGGACTCTGTCTTGTTCACTGCAGTATCCCAACTGC AGGTCCAGTGCAGGCA



MPLQLLLLILLGPGNSLQLWDTWADEAEKALGPLLARDRRQATEYEYLDYDFLPETEPPEMLRNSTDTTPLTGP
GTPESTTVEPAARRSTGLDAGGAVTELTTELANMGNLSTDSAAMEIQTTQPAATEAQTTPLAATEAQTTRLTATE
AQTTPLAATEAQTTPPAATEAQTTQPTGLEAQTTAPAAMEAQTTAPAAMEAQTTPPAAMEAQTTQTTAMEAQTTA
PEATEAQTTQPTATEAQTTPLAAMEALSTEPSATEALSMEPTTKRGLFIPFSVSSVTHKGIPMAASNLSVNYPVG
APDHISVKQCLLAILILALVATIFFVCTVVLAVRLSRKGHMYPVRNYSPTEMVCISSLLPDGGEGPSATANGGLS
KAKSPGLTPEPREDREGDDLTLHSFLP

923/2682 FIGURE 852

GGACGTCGAGGCATTACAATCGCGAAACCAAGCCATAGCATGAAACAGCGAGCTTGCAGCCTCACCGACGAGTCT CCAGTGACAGCTGAGACAACAAGGACCACGGGAGGAGGTGTAGGAGAGAGCGCCGCGAACAGCGATCGCCCAGC ACCAAGTCCGCTTCCAGGCTTTCGGTTTCTTTGCCTCCATCTTGGGTGCGCCTTCCCGGCGTCTAGGGGAGCGAA TGAAGTCAGCCCTCAGAAATGAAGTTGACTGCCTGCTGGCTTTCCTGTTGACTGGCCCGGAGCTGTACTGCAAGA CCCTTGTGAGCTTCCCTAGTCTAAGAGTAGG A T G TCTGCTGAAGTCATCCATCAGGTTGAAGAAGCACTTGATACAGATGAGAAGGAGATGCTGCTCTTTTTGTGCCGGGATGTTGCTATAGATGTGGTTCCACCTAATGTCAGGGACCT TCTGGATATTTTACGGGAAAGAGGTAAGCTGTCTGTCGGGGGACTTGGCTGAACTGCTCTACAGAGTGAGGCGATT TGACCTGCTCAAACGTATCTTGAAGATGGACAGAAAAGCTGTGGAGACCCACCTGCTCAGGAACCCTCACCTTGT TTCGGACTATAGAGTGCTGATGGCAGAGTTGGTGAGGATTTGGATAAATCTGATGTGTCCTCATTAATTTTCCT CATGAAGGATTACATGGGCCGAGGCAAGATAAGCAAGGAGAAGAGTTTCTTGGACCTTGTGGTTGAGTTGGAGAA ACTAAATTTGGTTGCCCCAGATCAACTGGATTTATTAGAAAAATGCCTAAAGAACATCCACAGAATAGACCTGAA GACAAAAATCCAGAAGTACAAGCAGTCTGTTCAAGGAGCAGGGACAAGTTACAGGAATGTTCTCCAAGCAGCAAT CCAAAAGAGTCTCAAGGATCCTTCAAATAACTTCAGGCTCCATAATGGGAGAAGTAAAGAACAAAGACTTAAGGA ACAGCTTGGCGCTCAACAAGAACCAGTGAAGAAATCCATTCAGGAATCAGAAGCTTTTTTGCCTCAGAGCATACC TGAAGAGAGATACAAGATGAAGAGCAAGCCCCTAGGAATCTGCCTGATAATCGATTGCATTGGCAATGAGACAGA GCTTCTTCGAGACACCTTCACTTCCCTGGGCTATGAAGTCCAGAAATTCTTGCATCTCAGTATGCATGGTATATC CATGGGAGATTCATGCCCTTATCTAGCAGGGAAGCCAAAGATGTTTTTTATTCAGAACTATGTGGTGTCAGAGGG CCAGCTGGAGAACAGCAGCCTCTTGGAGGTGGATGGGCCCAGCGATGAAGAATGTGGAATTCAAGGCTCAGAAGCG AGGGCTGTGCACAGTTCACCGAGAAGCTGACTTCTTCTGGAGCCTGTGTACTGCGGACATGTCCCTGCTGGAGCA GGATCTTCACATTGAACTCAATGGCTACATGTATGATTGGAACAGCAGAGTTTCTGCCAAGGAGAAATATTATGT CTGGCTGCAGCACACTCTGAGAAAGAAACTTATCCTCTCCTACACA<u>TAA</u>GAAACCAAAAAGGCTGGGCGTAGTGGC TCACACCTGTAATCCCAGCACTTTGGGAGGCCAAGGAGGGCAGATCACTTCAGGTCAGGAGTTCGAGACCAGCCT GGCCAACATGGTAAACGCTGTCCCTAGTAAAAATGCAAAAATTAGCTGGGTGTGGGTGTGGGTACCTGTGTTCCC AGTTACTTGGGAGGCTGAGGTGGGAGGATCTTTTGAACCCAGGAGTTCAGGGTCATAGCATGCTGTGATTGTGCC

924/2682 FIGURE 853

MSAEVIHQVEEALDTDEKEMLLFLCRDVAIDVVPPNVRDLLDILRERGKLSVGDLAELLYRVRRFDLLKRILKMD
RKAVETHLLRNPHLVSDYRVLMAEIGEDLDKSDVSSLIFLMKDYMGRGKISKEKSFLDLVVELEKLNLVAPDQLD
LLEKCLKNIHRIDLKTKIQKYKQSVQGAGTSYRNVLQAAIQKSLKDPSNNFRLHNGRSKEQRLKEQLGAQQEPVK
KSIQESEAFLPQSIPEERYKMKSKPLGICLIIDCIGNETELLRDTFTSLGYEVQKFLHLSMHGISQILGQFACMP
EHRDYDSFVCVLVSRGGSQSVYGVDQTHSGLPLHHIRRMFMGDSCPYLAGKPKMFFIQNYVVSEGQLENSSLLEV
DGPAMKNVEFKAQKRGLCTVHREADFFWSLCTADMSLLEQSHSSPSLYLQCLSQKLRQERKRPLLDLHIELNGYM
YDWNSRVSAKEKYYVWLQHTLRKKLILSYT

925/2682 FIGURE 854

GGCACGAGGCCGCCACCCGAGCCGGAGCGGGCTGGGCCGCCAAGGCAAG<u>ATC</u>GTGGACTACAGCGTGTGGGACCA ${\tt CATTGAGGTGTCTGATGATGAAGACGAGGCGCACCCCAACATCGACACGGCCAGTCTTCCGCTGGCGGCATCA}$ GGCCCGGGTGGAACGCATGGAGCAGTTCCAGAAGGAGGAGGAGGAACTGGACAGGGGCTGCCGCGAGTGCAAGCG CAAGGTGGCCGAGTGCCAGAGGAAACTGAAGGAGCTGGAGGTGGCCGAGGCGGCAAGGCAGAGCTGGAGCGCCT GCAGGCCGAGGCACAGCAGCTGCGCAAGGAGGAGCGGAGCTGGGAGCAGAAGCTGGAGAGATGCGCAAGAAGGA GAAGAGCATGCCCTGGAACGTGGACACGCTCAGCAAAGACGCTTCAGCAAGAGCATGGTAAATACCAAGCCCGA GAAGACGGAGGACTCAGAGGAGGTGAGGGAGCAGAAACACAAGACCTTCGTGGAAAAATACGAGAAACAGAT CAAGCACTTTGGCATGCTTCGCCGCTGGGATGACAGCCAAAAGTACCTGTCAGACAACGTCCACCTGGTGTGCGA GGAGACAGCCAATTACCTGGTCATTTGGTGCATTGACCTAGAGGTGGAGGAGAAATGTGCACTCATGGAGCAGGT GGCCCACCAGACAATCGTCATGCAATTTATCCTGGAGCTGGCCAAGAGCCTAAAGGTGGACCCCCGGGCCTGCTT CCGGCAGTTCTTCACTAAGATTAAGACAGCCGATCGCCAGTACATGGAGGGCTTCAACGACGAGCTGGAAGCCTT CAAGGAGCGTGTGCGGGCCGTGCCAAGCTGCGCATCGAGAAGGCCATGAAGGAGTACGAGGAGGAGGAGCGCAA CGATGTGAAGGACGTGCAGATGCTGCAGGACGCCATCAGCAAGATGGACCCCACCGACGCAAAGTACCACATGCA GCGCTGCATTGACTCTGGCCTCTGGGTCCCCAACTCTAAGGCCAGCGAGGCCAAGGAGGAGGAGGAGGCAGGTCC TGGGGACCCATTACTGGAAGCTGTTCCCAAGACGGCGATGAGAAGGATGTCAGTGTGTGACCTGCCCCAGCTAC AGGCCCGGGGGTCCGGGGAAGGGCAGAGGTCACCAGGCTGGTCTACCAGGTAGTTGGGGAGGGTCCCCAGCCAAG

926/2682 FIGURE 855

MVDYSVWDHIEVSDDEDETHPNIDTASLFRWRHQARVERMEQFQKEKEELDRGCRECKRKVAECQRKLKELEVAE GGKAELERLQAEAQQLRKEERSWEQKLEEMRKKEKSMPWNVDTLSKDGFSKSMVNTKPEKTEEDSEEVREQKHKT FVEKYEKQIKHFGMLRRWDDSQKYLSDNVHLVCEETANYLVIWCIDLEVEEKCALMEQVAHQTIVMQFILELAKS LKVDPRACFRQFFTKIKTADRQYMEGFNDELEAFKERVRGRAKLRIEKAMKEYEEEERKKRLGPGGLDPVEVYES LPEELQKCFDVKDVQMLQDAISKMDPTDAKYHMQRCIDSGLWVPNSKASEAKEGEEAGPGDPLLEAVPKTGDEKD VSV

927/2682 FIGURE 856

928/2682 FIGURE 857A

CCTACTCTATTCAGATATTCTCCAGATTCCTAAAGATTAGAGATCATTTCTCATTCTCCTAGGAGTACTCACTTC AGGAAGCAACCAGATAAAAGAGAGGTGCAACGGAAGCCAGAACATTCCTCCTGGAAATTCAACCTGTTTCGCAGT TTCTCGAGGAATCAGCATTCAGTCAATCCGGGCCGGAGCAGTCATCTGTGGTGAGGCTGATTGGCTGGGCAGGA ACAGCGCCGGGGCGTGGGCTGAGCACAGCGCTTCGCTCTTTTGCCACAGGAAGCCTGAGCTCATTCGAGTAGCG GCTCTTCCAAGCTCAAAGAAGCAGAGGCCGCTGTTCGTTTCCTTTAGGTCTTTCCACTAAAGTCGGAGTATCTTC AGGAGCAAAGAAGAAGAACTTTTTTAAACTGAACAATAAAAGTGAAAAAGATAAGAAGGAAAAGAAACCAACTGT CAGTGTATTTTCAATGTTTCGCTATTCAAATTGGCTTGACAAGTTGTATATGGTGGTGGGAACTTTGGCTGCCAT CATCCATGGGGCTGGACTTCCTCATGATGCTGGTGTTTTGGAGAAATGACAGATATCTTTGCAAATGCAGGAAA TTTAGAAGATCTGATGTCAAACATCACTAATAGAAGTGATATCAATGATACAGGGTTCTTCATGAATCTGGAGGA AGACATGACCAGGTATGCCTATTATTACAGTGGAATTGGTGCTGGGTGCTGGTTGCTGCTTACATTCAGGTTTC ATTTTGGTGCCTGGCAGCTGGAAGACAAATACACAAAATTAGAAAACAGTTTTTTCATGCTATAATGCGACAGGA GATAGGCTGGTTTGATGTGCACGATGTTGGGGAGCTTAACACCCGACTTACAGATGATGTCTCCAAGATTAATGA AGGAATTGGTGACAAAATTGGAATGTTCTTTCAGTCAATGGCAACATTTTTCACTGGGTTTATAGTAGGATTTAC ACGTGGTTGGAAGCTAACCCTTGTGATTTTGGCCATCAGTCCTGTTCTTGGACTGTCAGCTGCTGTCTGGGCAAA GATACTATCTTCATTTACTGATAAAGAACTCTTAGCGTATGCAAAAGCTGGAGCAGTAGCTGAAGAGGTCTTGGC TAAAAGAATTGGGATAAAGAAAGCTATTACAGCCAATATTTCTATAGGTGCTGCTTTCCTGCTGATCTATGCATC TTATGCTCTGGCCTTCTGGTATGGGACCACCTTGGTCCTCTCAGGGGAATATTCTATTGGACAAGTACTCACTGT ATTTTCTGTATTAATTGGGGCTTTTAGTGTTGGACAGGCATCTCCAAGCATTGAAGCATTTGCAAATGCAAGAGG AGCAGCTTATGAAATCTTCAAGATAATTGATAATAAGCCAAGTATTGACAGCTATTCGAAGAGTGGGCACAAACC AGATAATATTAAGGGAAATTTGGAATTCAGAAATGTTCACTTCAGTTACCCATCTCGAAAAGAAGTTAAGATCTT GAAGGGTCTGAACCTGAAGGTGCAGAGTGGCCAGACGGTGGCCCTGGTTGGAAACAGTGGCTGTGGGAAGAGCAC AACAGTCCAGCTGATGCAGAGGCTCTATGACCCCACAGAGGGATGGTCAGTGTTGATGGACAGGATATTAGGAC CATAAATGTAAGGTTTCTACGGGAAATCATTGGTGTGGTGAGTCAGGAACCTGTATTGTTTGCCACCACGATAGC TGAAAACATTCGCTATGGCCGTGAAAATGTCACCATGGATGAGATTGAGAAAGCTGTCAAGGAAGCCAATGCCTA GAAGCAGAGGATCGCCATTGCACGTGCCCTGGTTCGCAACCCCAAGATCCTCCTGCTGGATGAGGCCACGTCAGC CTTGGACACAGAAAGCGAAGCAGTGGTTCAGGTGGCTCTGGATAAGGCCAGAAAAGGTCGGACCACCATTGTGAT AGCTCATCGTTTGTCTACAGTTCGTAATGCTGACGTCATCGCTGGTTTCGATGATGGAGTCATTGTGGAGAAAGG AAATCATGATGAACTCATGAAAGAGAAAGGCATTTACTTCAAACTTGTCACAATGCAGACAGCAGGAAATGAAGT TGAATTAGAAAATGCAGCTGATGAATCCAAAAGTGAAATTGATGCCTTGGAAATGTCTTCAAATGATTCAAGATC CAGTCTAATAAGAAAAAGATCAACTCGTAGGAGTGTCCGTGGATCACAAGCCCAAGACAGAAAGCTTAGTACCAA AGAGGCTCTGGATGAAAGTATACCTCCAGTTTCCTTTTGGAGGATTATGAAGCTAAATTTAACTGAATGGCCTTA TTTTGTTGTTGGTGTATTTTGTGCCATTATAAATGGAGGCCTGCAACCAGCATTTGCAATAATATTTTCAAAGAT TATAGGGGTTTTTACAAGAATTGATGATCCTGAAACAAAACGACAGAATAGTAACTTGTTTTCACTATTGTTTCT AGCCCTTGGAATTATTTCTTTTATTACATTTTTCCTTCAGGGTTTCACATTTGGCAAAGCTGGAGAGATCCTCAC CAAGCGGCTCCGATACATGGTTTTCCGATCCATGCTCAGACAGGATGTGAGTTTGGTTTGATGACCCTAAAAACAC CACTGGAGCATTGACTACCAGGCTCGCCAATGATGCTGCTCAAGTTAAAGGGGCCTATAGGTTCCAGGCTTGCTGT AATTACCCAGAATATAGCAAATCTTGGGACAGGAATAATTATATCCTTCATCTATGGTTGGCAACTAACACTGTT ACTCTTAGCAATTGTACCCATCATTGCAATAGCAGGAGTTGTTGAAAATGAAAATGTTGTCTGGACAAGCACTGAA AGATAAGAAAGAACTAGAAGGTGCTGGGAAGATCGCTACTGAAGCAATAGAAAACTTCCGAACCGTTGTTTCTTT GACTCAGGAGCAGAAGTTTGAACATATGTATGCTCAGAGTTTGCAGGTACCATACAGAAACTCTTTGAGGAAAGC ACACATCTTTGGAATTACATTTTCCTTCACCCAGGCAATGATGTTTTTCCTATGCTGGATGTTTCCGGTTTGG AGCCTACTTGGTGGCACATAAACTCATGAGCTTTGAGGATGTTCTGTTAGTATTTTCAGCTGTTGTCTTTGGTGC CATGGCCGTGGGGCAAGTCAGTTCATTTGCTCCTGACTATGCCAAAGCCAAAATATCAGCAGCCCACATCATCAT CACATTTGGTGAAGTTGTATTCAACTATCCCACCGGACCGGACATCCCAGTGCTTCAGGGACTGAGCCTGGAGGT

929/2682 FIGURE 857B

930/2682 FIGURE 858

MDLEGDRNGGAKKKNFFKLNNKSEKDKKEKKPTVSVFSMFRYSNWLDKLYMVVGTLAAIIHGAGLPLMMLVFGEM TDIFANAGNLEDLMSNITNRSDINDTGFFMNLEEDMTRYAYYYSGIGAGVLVAAYIQVSFWCLAAGRQIHKIRKQ FFHAIMRQEIGWFDVHDVGELNTRLTDDVSKINEGIGDKIGMFFQSMATFFTGFIVGFTRGWKLTLVILAISPVL GLSAAVWAKILSSFTDKELLAYAKAGAVAEEVLAAIRTVIAFGGQKKELERYNKNLEEAKRIGIKKAITANISIG AAFLLIYASYALAFWYGTTLVLSGEYSIGQVLTVFSVLIGAFSVGQASPSIEAFANARGAAYEIFKIIDNKPSID SYSKSGHKPDNIKGNLEFRNVHFSYPSRKEVKILKGLNLKVQSGQTVALVGNSGCGKSTTVQLMQRLYDPTEGMV SVDGQDIRTINVRFLREIIGVVSQEPVLFATTIAENIRYGRENVTMDEIEKAVKEANAYDFIMKLPHKFDTLVGE RGAQLSGGQKQRIAIARALVRNPKILLLDEATSALDTESEAVVQVALDKARKGRTTIVIAHRLSTVRNADVIAGF DDGVIVEKGNHDELMKEKGIYFKLVTMQTAGNEVELENAADESKSEIDALEMSSNDSRSSLIRKRSTRRSVRGSQ ${ t AQDRKLSTKEALDESIPPVSFWRIMKLNLTEWPYFVVGVFCAIINGGLQPAFAIIFSKIIGVFTRIDDPETKRQN$ SNLFSLLFLALGIISFITFFLQGFTFGKAGEILTKRLRYMVFRSMLRQDVSWFDDPKNTTGALTTRLANDAAQVK GAIGSRLAVITQNIANLGTGIIISFIYGWQLTLLLLAIVPIIAIAGVVEMKMLSGQALKDKKELEGAGKIATEAI ENFRTVVSLTQEQKFEHMYAQSLQVPYRNSLRKAHIFGITFSFTQAMMYFSYAGCFRFGAYLVAHKLMSFEDVLL VFSAVVFGAMAVGQVSSFAPDYAKAKISAAHIIMIIEKTPLIDSYSTEGLMPNTLEGNVTFGEVVFNYPTRPDIP VLQGLSLEVKKGQTLALVGSSGCGKSTVVQLLERFYDPLAGKVLLDGKEIKRLNVQWLRAHLGIVSQEPILFDCS IAENIAYGDNSRVVSQEEIVRAAKEANIHAFIESLPNKYSTKVGDKGTQLSGGQKQRIAIARALVRQPHILLLDE ATSALDTESEKVVQEALDKAREGRTCIVIAHRLSTIQNADLIVVFQNGRVKEHGTHQQLLAQKGIYFSMVSVQAG TKRQ

931/2682 FIGURE 859A

TGCGAGGAGACGGCGCATGTCCGCCGCGCTTGCCCCTCTGCAGTACCCCGCCCTCTTCTCCACCACAATGAGATC TAAGTGCGTGCTGCGTGCGTACGTGAGGTCGAAAAGCGCACTGGGACGGCAGCCAGGAAACGTGTGGGCCTCT CTGCTGCGGTCTCCGAGGGCCGACCGCTGCCGGCGCGGGTCGTGCGGGCTGACTGTCGCTCTGCCTTTGACAGGA GAGGCTGCTTCTTGTAGAGGAAACAGCTTTGAAGTGTGGAGCGGGAAAGGAGCAGTTTCTGAGCTGCAAAAACTA GTTTCTAAACAGAGAGTTAATTGTTAAATCCAGT<u>ATG</u>CCACAGGAGGAGGTCCCTTTGAAGATGGCATGAATGA TCAGGATTTACCAAACTGGAGTAATGAGAATGTTGATGACAGGCTCAACAATATGGATTGGGGTGCCCAACAGAA GAAAGCAAATAGATCATCAGAAAAGAATAAGAAAAAGTTTTGGTGTAGAAAGTGATAAAAGAGTAACCAATGATAT TTCTCCGGAGTCGTCACCAGGAGTTGGAAGGCGAAGAACAAAGACTCCACATACGTTCCCACACAGTAGATACAT GAGTCAGATGTCTGTCCCAGAGCAGGCAGAATTAGAGAAACTGAAACAGCGGATAAACTTCAGTGATTTAGATCA GAGAAGCATTGGAAGTGATTCCCAAGGTAGAGCAACAGCTGCTAACAACAACGTCAGCTTAGTGAAAACCGAAA GCCCTTCAACTTTTTGCCTATGCAGATTAATACTAACAAGAGCAAAGATGCATCTACAAGTCCCCCAAACAGAGA AACGATTGGATCAGCACAGTGTAAAGAGTTGTTTGCTTCTGCTTTAAGTAATGACCTCTTGCAAAACTGTCAGGT GTCTGAAGAAGATGGGAGGGGAGAACCTGCAATGGAGAGCAGCCAGATTGTAAGCAGGCTTGTTCAAATTCGCGA TTATATTACTAAAGCTAGTTCCATGCGGGAAGATCTTGTAGAGAAAAATGAGAGATCTGCTAATGTTGAGCGCCT TCCTCAGCAGGAGCCTATGGAAGAGATAGAAAATTTGAAGAAACATGATTTATTAAAAAGAATGTTACAACA GCAGGAGCAACTAAGAGGAGCTCTACAGGGACGGCAGGCTGCACTTCTAGCTCTGCAACATAAAGCAGACGAAGC TATTGCAGTGATGGATGATTCTGTTGTTGCAGAAACTGCAGGTAGCTTATCTGGCGTCAGTATCACATCTGAACT AAATGAAGAATTGAATGACTTAATTCAGCGTTTTCATAATCAGCTTCGTGATTCTCAGCCTCCAGCTGTTCCAGA CAATAGAAGACAGGCAGAAAGTCTTTCATTAACTAGGGAGGTTTCCCAGAGCAGGAAACCATCAGCTTCAGAACG TTTACCTGATGAGAAAGTCGAACTTTTTAGCAAAATGAGAGTGCTACAGGAAAAGAAACAAAAAATGGACAAATT GCTTGGAGAACTTCATACACTTCGAGATCAGCATCTTAACAATTCATCATCCTCTCCACAAAGGAGTGTCGATCA GAGAAGTACTTCAGCTCCCTCTGCTTGTCTAGGCTTGGCACCGGTTGTCAATGGAGAATCCAATAGCCTCACATC ATCTGTTCCTTATCCTACTGCTTCTCTAGTATCTCAGAATGAGAGTGAAAACGAAGGCCACCTCAATCCATCTGA AAAACTCCAGAAGTTAAATGAAGTTCGAAAGAGATTGAATGAGCTAAGAGAATTAGTTCATTATTATGAACAAAC GTCAGACATGATGACAGATGCTGTGAATGAAAACAGGAAAGATGAAGAAACTGAAGAGTCAGAATATGATTCTGA GCATGAAAATTCCGAGCCTGTTACTAACATTCGAAATCCACAAGTAGCTTCCACTTGGAATGAAGTAAATAGTCA TAGTAATGCACAGTGTGTTTCTAATAATAGAGATGGGCGAACAGTTAATTCTAATTGTGAAATTAACAACAGATC TGCTGCCAACATAAGGGCTCTAAACGTGCCTCCTTCTTTAGATTGTCGATATAATAGAGAAGGGGAACAGGAGAT ATCTAGTCACAGGAGCAGTCTGGTTGATGAGCATCCAGAAGATGCTGAATTTGAACAGAAGATCAACCGACTTAT GGCTGCAAAACAGAAACTTAGACAGTTACAAGATCTTGTTGCTATGGTACAGGATGATGATGCAGCTCAAGGAGT TATCTCTGCCAGTGCATCAAATTTGGATGATTTCTACCCAGCAGAAGAAGACACCAAGCAAAATTCAAATAACAC TAGAGGAAATGCCAATAAAACACAGAAAGATACTGGAGTAAATGAAAAGGCAAGAGAGAAATTTTATGAGGCTAA TCAAGCATTGCAAACGGCATGCCCTGACTTACAGCTGTCAGCTGCTAGTGTGGGTAACTGTCCTACCAAAAAATA TATGCCAGCTGTTACTTCAACCCCAACTGTTAATCAACACGAGACCAGTACAAGCAAATCTGTTTTTGAGCCTGA GAGAAGAAAGCAGCTTGAAGCTCTGATGGCTGAACATCAGAGGAGGCAAGGTCTAGCTGAAACTGCATCTCCAGT GGCTGTGTCATTGAGAAGTGATGGATCTGAGAACCTATGTACTCCTCAGCAAAGTAGAACAGAAAAAAACGATGGC AACTTGGGGAGGGTCTACCCAGTGTGCACTAGATGAAGAAGAGGAGATGAAGACGGTTACCTTTCTGAAGGAATTGT TCGGACAGATGAAGAGGGAGGAAGAAGATGCCAGTTCCAATGATAACTTTTCTGTGTGTCCTTCTAACAG TGTGAATCATAACTCCTACAATCGAAAGGAAACTAAAAATACGTGGAAGAACAATTGCCCTTTTTCGGCAGATGA AAATTATCGTCCTTTAGCCAAGACAAGGCAACAGAATATCAGCATGCAACGGCAAGAAAACCTTCGTTGGGTGTC AGAGCTCTCTTACGTAGAAGAAGAAGAACAATGGCAAGAACAAATCCAGCTAAAGAAACAGCTTGATTTTAGTGT CAGTATTTGTCAGACTTTGATGCAAGACCAGCAGACTCTATCTTGTCTGCTACAAACTCTTCTCACGGGTCCTTA CAGTGTTATGCCCAGCAATGTTGCATCTCCTCAAGTACACTTCATAATGCACCAGTTGAACCAGTGCTATACTCA

932/2682 FIGURE 859B

GCTAACATGGCAACAGAATAATGTTCAGAGGTTGAAACAAATGCTAAATGAACTTATGCGCCAACGAAATCAGCA TCCAGAAAAACCTGGAGGCAAGGAAAGAGGCAGTAGTGCATCGCACCCTCCTTCTCCCAGTTTATTTTGTCCTTT CAGCTTTCCAACACAGCCTGTAAATCTCTTCAATATACCTGGATTTACTAACTTTTCATCATTTGCACCAGGTAT GAATTTCAGCCCTTTATTTCCTTCTAATTTTGGAGATTTTTCTCAGAATATCTCTACACCCAGTGAACAGCAGCA ACCCTTAGCCAGAATTCTTTCAGGAAAAACAGAATATATGGCTTTTCCAAAACCTTTTGAAAGCAGTTCCTCTAT TGGAGCAGAGAAACCAAGGAATAAAAAACTGCCTGAAGAGGAGGTGGAAAGCAGTAGGACACCATGGTTATATGA ACAAGAAGGTGAAGTAGAGAAACCATTTATCAAGACTGGATTTTCAGTGTCTGTAGAAAAATCTACAAGTAGTAA CCGCAAAAATCAATTAGATACAAACGGAAGAAGACGCCAGTTTGATGAAGAATCACTGGAAAGCTTTAGCAGTAT GCCTGATCCAGTAGATCCAACAACAGTGACTAAAACATTCAAGACAAGAAAAGCGTCTGCACAGGCCAGCCTGGC ATCTAAAGATAAAACTCCCAAGTCAAAAAGTAAGAAGAGGAATTCTACTCAGCTGAAAAGCAGAGTTAAAAACAT CAGGTATGAAAGTGCCAGTATGTCTAGCACATGTGAACCTTGCAAAAGTAGGAACAGACATTCAGCCCAGACTGA AGAGCCTCTTCAAGCAAAAGTATTCAGCAGAAAGAATCATGAGCAACTGGAAAAAATAATAAAATGTAATAGGTC AGCTACATTAATTTCTCAAAATGAATCTCGTCCACATTTTCTTATTGAACTCTTCCATGAGCTGCAGCTACTAAA CACAGACTACTTGAGACAGAGGGCTTTATATGCATTGCAGGACATAGTATCCAGACATATTTCTGAGAGCCATGA AAAAGGAGAAAATGTAAAGTCAGTAAACTCTGGTACTTGGATAGCATCAAACTCAGAACTTACTCCTAGTGAGAG CCTTGCTACTGATGATGAAACTTTTGAGAAGAACTTTGAAAGAGAAACCCATAAAATAAGTGAGCAAAATGA TGCTGATAATGCTAGTGTCCTGTCTGTATCATCAAATTTTGAGCCTTTTGCAACAGATGATCTAGGTAACACCGT GATTCACTTAGATCAAGCATTAGCCAGAATGAGAGAATATGAGCGTATGAAGACTGAGGCTGAAAGTAACTCAAA TATGAGATGCACCTGCAGGATTATTGAGGATGGAGATGGTGCTGGTGCAGGTACTACAGTTAATAATTTAGAAGA AACTCCCGTTATTGAAAATCGTAGTTCACAACAACCTGTAAGTGAAGTTTCTACCATCCCATGTCCTAGAATTGA TACTCAGCAGCTGGACCGGCAAATTAAAGCAATTATGAAAGAAGTCATTCCTTTTTTGAAGGAGCACATGGATGA AGTATGCTCCTCGCAGCTTCTAACTTCAGTAAGGCGCATGGTTTTGACCCTTACCCAGCAAAATGATGAGAGCAA AGAGTTTGTAAAGTTCTTTCATAAACAACTTGGAAGTATATTACAGGATTCACTGGCAAAATTTGCTGGCAGAAA TATGCAAGATTTGGATAATAATAGTATAACTGTTAAACAGAGATGCAAAAGGAAAATAGAAGCAACTGGAGTGAT ACAATCTTGTGCCAAAGAGGCTAAAAGGATTCTTGAAGATCATGGCTCACCTGCTGGAGAGATTGATGAAGA CAAAGACAAGGATGAAACTGAAACAGTTAAGCAGACTCAAACATCTGAGGTGTATGATGGTCCCAAAAATGTAAG ATCTGATATTTCTGATCAAGAGGAAGATGAAGAAAGTGAAGGATGTCCAGTGTCTATTAATTTGTCTAAAGCTGA CCCTGTGGATGTCCAGACTTCCCTCCAGGCTAACACTGAAGCTACTGAAGAAAATGAACATGATGAACAGGTCCT ACAACGTGACTTTAAAAAGACAGCAGAAAGCAAAAATGTCCATTGGAACGAGAAGCCACTAGTAAAAATGACCAA AAATAACTGTCCTGTGAAACCCAGTTACCTCAATATCTTGGAAGATGAGCAACCTTTAAATAGTGCTGCCCATAA GGAGTCACCTCCTACTGTTGATTCAACTCAACAGCCTAACCCTTTGCCGTTACGTTTACCTGAAATGGAACCCTT ATCTCCAGTGTTAGTGAATGACTATGAAGCAGAATCTGGTAATATAAGTCAAAAGTCTGATGAAGAAGATTTTGT ACAGAAAAACCATTTATCTGGTGAAATGTGTGAAATGCAGACCGAAGAATTAGCTGGAAATTCTGAGACACTAAA AGAACCTGAAACGGTGGGAGCCCAGAGTATATGAGATGTCTTCAGAGGCTCATCTAACTCTGTCCTTACATACTC AATGCATATATGAAAACAATACTAAATAAACATCTGATCTGTATAAAAATCT

933/2682 FIGURE 860

 ${\tt MATGGGPFEDGMNDQDLPNWSNENVDDRLNNMDWGAQQKKANRSSEKNKKKFGVESDKRVTNDISPESSPGVGRR}$ ${\tt RTKTPHTFPHSRYMSQMSVPEQAELEKLKQRINFSDLDQRSIGSDSQGRATAANNKRQLSENRKPFNFLPMQINT}$ NKSKDASTSPPNRETIGSAQCKELFASALSNDLLQNCQVSEEDGRGEPAMESSQIVSRLVQIRDYITKASSMRED LVEKNERSANVERLTHLIDHLKEQEKSYMKFLKKILARDPQQEPMEEIENLKKQHDLLKRMLQQQEQLRGALQGR QAALLALQHKADEAIAVMDDSVVAETAGSLSGVSITSELNEELNDLIQRFHNQLRDSQPPAVPDNRRQAESLSLT ${\tt REVSQSRKPSASERLPDEKVELFSKMRVLQEKKQKMDKLLGELHTLRDQHLNNSSSSPQRSVDQRSTSAPSACLG}$ LAPVVNGESNSLTSSVPYPTASLVSQNESENEGHLNPSEKLQKLNEVRKRLNELRELVHYYEQTSDMMTDAVNEN RKDEETEESEYDSEHENSEPVTNIRNPQVASTWNEVNSHSNAQCVSNNRDGRTVNSNCEINNRSAANIRALNVPP SLDCRYNREGEQEIHVAQGEDDEEEEEEAEEEGVSGASLSSHRSSLVDEHPEDAEFEQKINRLMAAKQKLRQLQD ${\tt LVAMVQDDDAAQGVISASASNLDDFYPAEEDTKQNSNNTRGNANKTQKDTGVNEKAREKFYEAKLQQQQRELKQL}$ QEERKKLIDIHEKIQALQTACPDLQLSAASVGNCPTKKYMPAVTSTPTVNQHETSTSKSVFEPEDSSIVDNELWS EMRRHEMLREELRQRRKQLEALMAEHQRRQGLAETASPVAVSLRSDGSENLCTPQQSRTEKTMATWGGSTQCALD EEGDEDGYLSEGIVRTDEEEEEEODASSNDNFSVCPSNSVNHNSYNRKETKNTWKNNCPFSADENYRPLAKTRQQ NISMQRQENLRWVSELSYVEEKEQWQEQIQLKKQLDFSVSICQTLMQDQQTLSCLLQTLLTGPYSVMPSNVASPQ VHFIMHQLNQCYTQLTWQQNNVQRLKQMLNELMRQRNQHPEKPGGKERGSSASHPPSPSLFCPFSFPTQPVNLFN IPGFTNFSSFAPGMNFSPLFPSNFGDFSQN1STPSEQQQPLARILSGKTEYMAFPKPFESSSSIGAEKPRNKKLP EEEVESSRTPWLYEQEGEVEKPFIKTGFSVSVEKSTSSNRKNQLDTNGRRRQFDEESLESFSSMPDPVDPTTVTK TFKTRKASAQASLASKDKTPKSKSKKRNSTQLKSRVKNIRYESASMSSTCEPCKSRNRHSAQTEEPLQAKVFSRK NHEQLEKIIKCNRSTEISSETGSDFSMFEALQDTIYSEVATLISQNESRPHFLIELFHELQLLNTDYLRQRALYA LQDIVSRHISESHEKGENVKSVNSGTWIASNSELTPSESLATTDDETFEKNFERETHKISEQNDADNASVLSVSS NFEPFATDDLGNTVIHLDQALARMREYERMKTEAESNSNMRCTCRIIEDGDGAGAGTTVNNLEETPVIENRSSQQ PVSEVSTIPCPRIDTQQLDRQIKAIMKEVIPFLKEHMDEVCSSQLLTSVRRMVLTLTQQNDESKEFVKFFHKQLG SILODSLAKFAGRKLKDCGEDLLVEISEVLFNELAFFKLMQDLDNNSITVKQRCKRKIEATGVIQSCAKEAKRIL EDHGSPAGEIDDEDKDKDETETVKQTQTSEVYDGPKNVRSDISDQEEDEESEGCPVSINLSKAETQALTNYGSGE DENEDEEMEEFEEGPVDVQTSLQANTEATEENEHDEQVLQRDFKKTAESKNVHWNEKPLVKMTKNNCPVKPSYLN ILEDEOPLNSAAHKESPPTVDSTQQPNPLPLRLPEMEPLVPRVKEVKSAQETPESSLAGSPDTESPVLVNDYEAE SGNISQKSDEEDFVKVEDLPLKLTIYSEADLRKKMVEEEQKNHLSGEMCE

934/2682 FIGURE 861

TAGGATGGTAGCACACAACCAGGTGGCAGCCGACAATGCAGTCTCCACAGCAGCAGAGCCCCGACGGCCGACAGA ACCTTCCTCTTCTCCTCCTCGCCGGGGCCCCGGGGCCGGGCCGTGCCCGGGGTCCCGGGCCCGGG CCCCGGCGACACGCACATTCCGTTCGCACGCCGATTACCGGCGCATCACGCGCGCCAGCGCGCTCCT ${\tt CACCTTCCTGGTGCGCGACAGCCGCCAGCGGAACTGCTTTTTCGCCCTTAGCGTGAAGATGGCCTCGGGACCCAC}$ GAGCATCCGCGTGCACTTTCAGGCCGGCCGCTTTCACCTGGATGGCAGCCGCGAGAGCTTCGACTGCCTCTTCGA GCTGCTGGAGCACTACGTGGCGGCGCCGCGCGCATGCTGGGGGGCCCCGCTGCGCCAGCGCCGCGTGCGGCCGCT GCAGGAGCTGTGCCGCCAGCGCATCGTGGCCACCGTGGGCCGCGAGAACCTGGCTCGCATCCCCTCAACCCCGT $\tt CCTCCGCGACTACCTGAGCTCCTTCCCCTTCCAGATT{\color{red} TGA} CCGGCAGCCCCGCCGTGCACGCAGCATTAACTGG$ TGGGTGTAGGGGCGAGGCGCCTCCGGCCTGGAGACGAGGCCGCAGACCCCTTCTCACCTCTTGAGGGGG GAACTCGCACCTCCTACCTCTTCATGTTTACATATACCCAGTATCTTTGCACAAACCAGGGGTTGGGGGAGGGTC TCTGGCTTTATTTTTCTGCTGTGCAGAATCCTATTTTATATTTTTTAAAGTCAGTTTAGGTAATAAACTTTATTA TGAAAGTTTTTTTTT

935/2682 FIGURE 862

 ${\tt MVAHNQVAADNAVSTAAEPRRRPEPSSSSSSSPAAPARPRPCPAVPAPAPGDTHFRTFRSHADYRRITRASALLD} \\ {\tt ACGFYWGPLSVHGAHERLRAEPVGTFLVRDSRQRNCFFALSVKMASGPTSIRVHFQAGRFHLDGSRESFDCLFEL} \\ {\tt LEHYVAAPRRMLGAPLRQRRVRPLQELCRQRIVATVGRENLARIPLNPVLRDYLSSFPFQI} \\ {\tt Constraint of the properties of the propertie$

936/2682 FIGURE 863

CAGACAGACCAATCACGCGCATTCTTCGGCCACGACAAGCGCGCCTCTGATCACGTGACCAGGTCCGCTACCCAC GTGGGGGCTCAGCGTGCACCCTTCTTTGTGCTCGGGTTAGGAGGAGCTAGGCTGCCATCGGGCCGGTGCAGATAC GGGGTTGCTCTTTTGCTCATAAGAGGGGCTTCGCTGGCAGTCTGAACGGCAAGCTTGAGTCAGGACCCTTAATTA GGTACAGCTGCCCAAGGGCGTTCGTAACGGGAATGCCGAAGCGTGGGAAAAAAGGGAGCGGTGGCGGAAGACGGGG ATGAGCTCAGGACAGAGCCAGAGGCCAAGAAGAGTAAGACGCCGCAAAGAAAAATGACAAAGAGGCAGCAGGAG AGGGCCCAGCCCTGTATGAGGACCCCCCAGATCAGAAAACCTCACCCAGTGGCAAACCTGCCACACTCAAGATCT ATATACTGTGCCTTCAAGAGACCAAATGTTCAGAGAACAAACTACCAGCTGAACTTCAGGAGCTGCCTGGACTCT CTCATCAATACTGGTCAGCTCCTTCGGACAAGGAAGGGTACAGTGGCGTGGGCCTGCTTTCCCGCCAGTGCCCAC TCAAAGTTTCTTACGGCATAGGCGATGAGGAGCATGATCAGGAAGGCCGGGTGATTGTGGCTGAATTTGACTCGT TTGTGCTGGTAACAGCATATGTACCTAATGCAGGCCGAGGTCTGGTACGACTGGAGTACCGGCAGCGCTGGGATG AAGCCTTTCGCAAGTTCCTGAAGGGCCTGGCTTCCCGAAAGCCCCTTGTGCTGTGTGGAGACCTCAATGTGGCAC ATGAAGAAATTGACCTTCGCAACCCCAAGGGGAACAAAAAGAATGCTGGCTTCACGCCACAAGAGGCCCAAAGGCT CTCTGTTACCTGCATTGTGTGACAGCAAGATCCGTTCCAAGGCCCTCGGCAGTGATCACTGTCCTATCACCCTAT ACCTAGCACTGTGACACCACCCCTAAATCACTTTGAGCCTGGGAAATAAGCCCCCTCAACTACCATTCCTTCTTT AAACACTCTTCAGAGAAATCTGCATTCTATTTCTCATGTATAAAACTAGGAATCCTCCAACCAGGCTCCTGTGAT

937/2682 FIGURE 864

MPKRGKKGAVAEDGDELRTEPEAKKSKTAAKKNDKEAAGEGPALYEDPPDQKTSPSGKPATLKICSWNVDGLRAW IKKKGLDWVKEEAPDILCLQETKCSENKLPAELQELPGLSHQYWSAPSDKEGYSGVGLLSRQCPLKVSYGIGDEE HDQEGRVIVAEFDSFVLVTAYVPNAGRGLVRLEYRQRWDEAFRKFLKGLASRKPLVLCGDLNVAHEEIDLRNPKG NKKNAGFTPQERQGFGELLQAVPLADSFRHLYPNTPYAYTFWTYMMNARSKNVGWRLDYFLLSHSLLPALCDSKI RSKALGSDHCPITLYLAL

938/2682 FIGURE 865

939/2682 FIGURE 866

 ${\tt MESDFYLRYYVGHKGKFGHEFLEFEFRPDGKLRYANNSNYKNDVMIRKEAYVHKSVMEELKRIIDD} \\ {\tt LWPPPDRVGRQELEIVIGDEHISFTTSKIGSLIDVNQSKDPEGLRVFYYLVQDLKCLVFSLIGLHFKIKPI}$

940/2682 FIGURE 867

CATTTCATTGGCGTTTGAGTCAGCAAAGAAGTCAAGATGGCCAAAGTTCCAGACATGTTTGAAGACCTGAAGAAC TGTTACAGTGAAAATGAAGAAGACAGTTCCTCCATTGATCATCTGTCTCTGAATCAGAAATCCTTCTATCATGTA AGCTATGGCCCACTCCATGAAGGCTGCATGGATCAATCTGTGTCTCTGAGTATCTCTGAAAACCTCTAAAACATCC AGCCAATCCATCACTGATGATGACCTGGAGGCCATCGCCAATGACTCAGAGGAAGAAATCATCAAGCCTAGGTCA GCACCTTTTAGCTTCCTGAGCAATGTGAAATACAACTTTATGAGGATCATCAAATACGAATTCATCCTGAATGAC GCCCTCAATCAAAGTATAATTCGAGCCAATGATCAGTACCTCACGGCTGCTGCATTACATAATCTGGATGAAGCA GTGAAATTTGACATGGGTGCTTATAAGTCATCAAAGGATGATGCTAAAATTACCGTGATTCTAAGAATCTCAAAA ACTCAATTGTATGTGACTGCCCAAGATGAAGACCAACCAGTGCTGCTGAAGGAGATGCCTGAAGATACCCAAAACC ATCACAGGTAGTGAGACCAACCTCCTCTTCTTCTGGGAAACTCACGGCACTAAGAACTATTTCACATCAGTTGCC CATCCAAACTTGTTTATTGCCACAAAGCAAGACTACTGGGTGTGCTTGGCAGGGGGGCCCACCCTCTATCACTGAC $\tt TTTCAGATACTGGAAAACCAGGCG\underline{TAG} GTCTGGAGTCTCACTTGTCTCACTTGTGCAGTGTTGACAGTTCATATG$ TACCATGTACATGAAGAAGCTAAATCCTTTACTGTTAGTCATTTGCTGAGCATGTACTGACCCTTGTAATTCTAA ATGAATGTTTACACTCTTTGTAAGAGTGGAACCAACACTAACATATAATGTTGTTATTTAAAGAACACCCTATAT TTTGCATAGTACCAATCATTTTAATTATTATTCTTCATAACAATTTTAGGAGGACCAGAGCTACTGACTATGGCT ACCAAAAAGACTCTACCCATATTACAGATGGGCAAATTAAGGCATAAGAAAACTAAGAAATATGCACAATAGCAG TTGAAACAAGAAGCCACAGACCTAGGATTTCATGATTTCATCTTTCAACTGTTTGCCTTCTACTTTTAAGTTGCTGA TGAACTCTTAATCAAATAGCATAAGTTTCTGGGACCTCAGTTTTATCATTTTCAAAATGGAGGGAATAATACCTA AGCCTTCCTGCCGCAACAGTTTTTTATGCTAATCAGGGAGGTCATTTTGGTAAAATACTTCTTGAAGCCGAGCCT ATTATAATATACTATATTTATGGGAACCCCTTCATCCTCTGAGTGTGACCAGGCATCCTCCACAATAGCAGACAG TGTTTTCTGGGATAAGTAAGTTTGATTTCATTAATACAGGGCATTTTGGTCCAAGTTGTGCTTATCCCATAGCCA AGTCCTACAAGCTAAAATTAGATGAACTCAACTTTGACAACCATGAGACCACTGTTATCAAAGTTGAGTTCATCT AATTTTAGCTTGTAGAGACGGGATTTCACCATCTTGGCCGTGCTGGTCTCGAACTTCTGACCTCGTGATCCACCC GCCTCGGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCATCGCGCCCGGCCTGGAGTTTCTACTGTGCACCAG TTTTCATCTGCGCAAACAGATTCAGGAACTTTGTAATTTACATAAGGTCACATTCATCCTAATTCACAAAATCAA GATTTCACACCTATTCCTTTTCTTTCCAGTGCCTGTGCTTTTTCTCTCATACCAAGGAGAAGTAATAAGCCTAA CGTTTTAAACCTCACAAAAGTACATACAGAAAAGTAAATAGCCTAATTTTGCAACTAATACAAATGGCGCTGTAC TTCTTTGGTGATGGTAGATTTATAATTTTTGAAGTATGGTAGATTCAAATGAACCACTGAAAAGGCATTTAGTTT CTTGTCCCAAATAAAAAAAAAAAAAAAAAA

941/2682 FIGURE 868

MAKVPDMFEDLKNCYSENEEDSSSIDHLSLNQKSFYHVSYGPLHEGCMDQSVSLSISETSKTSKLTFKESMVVVA TNGKVLKKRRLSLSQSITDDDLEAIANDSEEEIIKPRSAPFSFLSNVKYNFMRIIKYEFILNDALNQSIIRANDQ YLTAAALHNLDEAVKFDMGAYKSSKDDAKITVILRISKTQLYVTAQDEDQPVLLKEMPEIPKTITGSETNLLFFW ETHGTKNYFTSVAHPNLFIATKQDYWVCLAGGPPSITDFQILENQA

942/2682 FIGURE 869

943/2682 FIGURE 870

MQPILLLAFILLPRADAGEIIGGHEAKPHSRPYMAYLMIWDQKSLKRCGGFLIQDDFVLTAAHCWGSSINVTLG AHNIKEQEPTQQFIPVKRPIPHPAYNPKNFSNDIMLLQLERKAKRTRAVQPLRLPSNKAQVKPGQTCSVAGWGQT APLGKHSHTLQEVKMTVQEDRKCESDLRHYYDSTIELCVGDPEIKKTSFKGDSGGPLVCNKVAQGIVSYGRNNGM PPRACTKVSSFVHWIKKTMKRY

944/2682 FIGURE 871

ACAGACTGCCAAATGGAACAGACAAGCAGGTTGTCTTGTGTTAAAGAAAATGAGATATGAGTCAGTTACTCCCGG AGGCAATGCTGCTGTTCAGCTCTTGTGTTTTTGTGGCCAGGGTCTTCATGAACACTAATAGGGGTACCAGGCCCT CTTCCTTGTTAGAAGAAATCAGGATAACAAAGGTATATTGGGCACCCCTACAAAAGGAATCTGTATCTGTATCAA GATGATCTGAAGAACAGCTTCTACCTTTAGGAATGTCTAGTGTTCCAAAATGACTAGCATCTTCCATTTTGCCAT TATCTTCATGTTAATACTTCAGATCAGAATACAATTATCTGAAGAAAGTGAATTTTTAGTTGATAGGTCAAAAAA CGGTCTCATCCACGTTCCTAAAGACCTATCCCAGAAAACAACAATCTTAAATATATCGCAAAATTATATCTGA GCTTTGGACTTCTGACATCTTATCACTGTCAAAACTGAGGATTTTGATAATTTCTCATAATAGAATCCAGTATCT TGATATCAGTGTTTTCAAATTCAACCAGGAATTGGAATACTTGGATTTGTCCCACAACAAGTTGGTGAAGATTTC TTGCCACCCTACTGTGAACCTCAAGCACTTGGACCTGTCATTTAATGCATTTGATGCCCTGCCTATATGCAAAGA GTTTGGCAATATGTCTCAACTAAAATTTCTGGGGTTGAGCACCACACACTTAGAAAAATCTAGTGTGCTGCCAAT TGCTCATTTGAATATCAGCAAGGTCTTGCTGGTCTTAGGAGAGACTTATGGGGAAAAAGAAGACCCTGAGGGCCT AGTCAAGACTGTAGCAAATCTGGAACTATCTAATATCAAATGTGTGCTAGAAGATAACAAATGTTCTTACTTCCT AAGTATTCTGGCGAAACTTCAAACAAATCCAAAGTTATCAAGTCTTACCTTAAACAACATTGAAACAACTTGGAA TTCTTTCATTAGGATCCTCCAGCTGGTTTGGCATACAACTGTATGGTATTTCTCAATTTCAAACGTGAAGCTACA GGGTCAGCTGGACTTCAGAGATTTTGATTATTCTGGCACTTCCTTGAAGGCCTTGTCTATACACCAAGTTGTCAG CGATGTGTTCGGTTTTCCGCAAAGTTATATCTATGAAATCTTTTCGAATATGAACATCAAAAATTTCACAGTGTC TGGTACACGCATGGTCCACATGCTTTGCCCATCCAAAATTAGCCCGTTCCTGCATTTGGATTTTTCCAATAATCT CTTAACAGACACGGTTTTTGAAAATTGTGGGCACCTTACTGAGTTGGAGACACTTATTTTACAAATGAATCAATT AAAAGAACTTTCAAAAATAGCTGAAATGACTACACAGATGAAGTCTCTGCAACAATTGGATATTAGCCAGAATTC TGTAAGCTATGATGAAAAGAAAGGAGACTGTTCTTGGACTAAAAGTTTATTAAGTTTAAATATGTCTTCAAATAT ACTTACTGACACTATTTTCAGATGTTTACCTCCCAGGATCAAGGTACTTGATCTTCACAGCAATAAAATAAAGAG CATTCCTAAACAAGTCGTAAAACTGGAAGCTTTGCAAGAACTCAATGTTGCTTTCAATTCTTTAACTGACCTTCC CTTCCAGAGCTGCCAGAAGATGAGGTCAATAAAAGCAGGGGACAATCCATTCCAATGTACCTGTGAGCTAGGAGA ATTTGTCAAAAATATAGACCAAGTATCAAGTGAAGTGTTAGAGGGCTGGCCTGATTCTTATAAGTGTGACTACCC GGAAAGTTATAGAGGAACCCTACTAAAGGACTTTCACATGTCTGAATTATCCTGCAACATAACTCTGCTGATCGT TCTCAGGATGGTGTGCCAGTGGACCCAGACCCGGCGCAGGGCCAGGAACATACCCTTAGAAGAACTCCAAAGAAA AGAGAAAGAAGGTATGCAGATTTGCCTTCATGAGAGAAACTTTGTTCCTGGCAAGAGCATTGTGGAAAATATCAT CACCTGCATTGAGAAGAGTTACAAGTCCATCTTTGTTTTGTCTCCCAACTTTGTCCAGAGTGAATGGTGCCATTA TGAACTCTACTTTGCCCATCACAATCTCTTTCATGAAGGATCTAATAGCTTAATCCTGATCTTGCTGGAACCCAT TCCGCAGTACTCCATTCCTAGCAGTTATCACAAGCTCAAAAGTCTCATGGCCAGGAGGACTTATTTGGAATGGCC CAAGGAAAAGAGCAAACGTGGCCTTTTTTGGGCTAACTTAAGGGCAGCCATTAATATTAAGCTGACAGAGCAAGC AAAGAAA<u>TAG</u>ATTACACATCAAGTGAAAAATATTCCTCCTGTTGATATTGCTGCTTTTGGAAGTTCCAACAATGA CTTTATTTTGCATCAGCATAGATGTAAACACAATTGTGAGTGTATGATGTAGGTAAAAATATATACCTTCGGGTC GCAGTTCACCATTTATATGTGGTATTAAAAATTAATGAAATGATATAACTTTGATTT

945/2682 FIGURE 872

MTSIFHFAIIFMLILQIRIQLSEESEFLVDRSKNGLIHVPKDLSQKTTILNISQNYISELWTSDILSLSKLRILI ISHNRIQYLDISVFKFNQELEYLDLSHNKLVKISCHPTVNLKHLDLSFNAFDALPICKEFGNMSQLKFLGLSTTH LEKSSVLPIAHLNISKVLLVLGETYGEKEDPEGLQDFNTESLHIVFPTNKEFHFILDVSVKTVANLELSNIKCVL EDNKCSYFLSILAKLQTNPKLSSLTLNNIETTWNSFIRILQLVWHTTVWYFSISNVKLQGQLDFRDFDYSGTSLK ALSIHQVVSDVFGFPQSYIYEIFSNMNIKNFTVSGTRMVHMLCPSKISPFLHLDFSNNLLTDTVFENCGHLTELE TLILQMNQLKELSKIAEMTTQMKSLQQLDISQNSVSYDEKKGDCSWTKSLLSLNMSSNILTDTIFRCLPPRIKVL DLHSNKIKSIPKQVVKLEALQELNVAFNSLTDLPGCGSFSSLSVLIIDHNSVSHPSADFFQSCQKMRSIKAGDNP FQCTCELGEFVKNIDQVSSEVLEGWPDSYKCDYPESYRGTLLKDFHMSELSCNITLLIVTIVATMLVLAVTVTSL CIYLDLPWYLRMVCQWTQTRRRARNIPLEELQRNLQFHAFISYSGHDSFWVKNELLPNLEKEGMQICLHERNFVP GKSIVENIITCIEKSYKSIFVLSPNFVQSEWCHYELYFAHHNLFHEGSNSLILILLEPIPQYSIPSSYHKLKSLM ARRTYLEWPKEKSKRGLFWANLRAAINIKLTEQAKK

946/2682 FIGURE 873

GTCTGAGGCTCGGCCGCCTGAGCCGCGGACGGTTTGCTGAGCCCGTTAGTGCGCCCGGCCGAGACACGCCGCCGC $Coldsymbol{ATG}$ TCCCGCTACCTGCGCCCCCAACACGTCTCTGTTCGTCAGGAACGTGGCCGACGACACCAGGTCTGAAGA CTTGCGGCGTGAATTTGGTCGTTATGGTCCTATAGTTGATGTTGTTCCACTTGATTTCTACACTCGCCGTCC AAGAGGATTTGCTTATGTTCAATTTGAGGATGTTCGTGATGCTGAAGACGCTTTACATAATTTGGACAGAAAGTG GATTTGTGGACGGCAGATTGAAATACAGTTTGCCCAGGGGGATCGAAAGACACCAAATCAGATGAAAGCCAAGGA AGGGAGGAATGTGTACAGTTCTTCACGCTATGATGATTATGACAGATACAGACGTTCTAGAAGCCGAAGTTATGA AAGGAGGAGATCAAGAAGTCGGTCTTTTGATTACAACTATAGAAGATCGTATAGTCCTAGAAACAGTAGACCGAC TGGAAGACCACGGCGTAGCAGAAGCCATTCCGACAATGATAGATTCAAACACCGAAATCGATCTTTTTCAAGATC ATCTCACACCAAAACTAGAGGCACCTCTAAAACAGATTCCAAAACACATTATAAGTCTGGCTCAAGATATGAAAA GGAATCAAGGAAAAAAGAACCACCTAGATCCAAATCTCAGTCAAGATCACAGTCTAGGTCTAGGTCAAAATCTAG ${\tt ATCAAGGTCTTGGACTAGTCCTAAGTCCAGTGGCCAC} \underline{{\tt TGA}} {\tt TAGTATAAACCATGGTCATTTTTAGGCATGTATCA}$ TTCATTTACTCATAGTTTGGTTTACTTAAATTATCAGGAATACAATGTTGCAATGATGCTTAAAAAAACACTTGTT AGTTTTCCCTGTACCAGGCAATGGTTATAATTAAAATGATATGCTGTTGAGAAGCCACTCTTAAGAGTCCAGTTT GTTTAATGTTATGGGCAGCTACCAATTTGTGGTGTCTCTGTATATTTTTGTAAAGATTCTCATTTTTTATGCTTG AAGTATTTGGTGAAAAGATGTTGGTTGACCATAATTTGCAACATTGTCTCATTAAAAATAAACTTTCATATTCAT ATTTGGTAGAACTGTTAACCTAGAAATGTAGCTTGCTAATAAGATAGAATGATACAAAAGTGAAGTAGTAGCCAC AGTACAACACTGACTGCTCAGACACATTTAGGTTCAGGGTGGACCTTTATGTCTTGTCAAGATGTCTAGGCCCGG CGAGACCAGCCTGACCAACACGGTGAAACCCCGTCTCTACTAAAAATACAAAAATTATCCGGGCATGGTGGCACA TGCCTGTAATCTCAGCTACTCAGGAGGCTGAGGCAAGAGAATCGCTTGAACCTGGGAGGTAGAAGTTGCAGTGAG TCTAGGCCAATGATAATTATTTTTGATGCAGTGTGGATTAGTTCTTTTGTTAACCCCACTGTCTTGGGGAATGAT GAACATAGAAAACACAAAAACTCACCTTAAAATTTGAGCAGGTCGTTGATGGCAAAAATAATTTTAAGGAAAAAG GAATATTCTTATGTAGTTATTCTAAAGTTTAAGGAGCGTTGTTGACCATAATATTGCTTAGTTTTCTTACTGCTG TTTATTTAATACGAGGCAAGTTGTAAGACAACACTCATTCTAGGTGATTCTGTGGTGCCATGAAATTTAAGGTAA TTTGGGGAAAAGGATTAGTCAGTTTTAAGCAAGAGTCACATCTTTTGAGCTTTCGATTATCAGTGTAGTACCTGA CTAAAAATGAAGTAATACCCTTAAACCATTTATAATTTCTAGTATTTCTCTGAAAGATCGTTTTGGGGACAAAAG TACAAGTACGAATTATGGACAAACGATTCCTTTTAGAGGATTACTTTTTTCAATTTCGGTTTTAGTAATCTAGGC TTTGTATATTTGATAGTATTTCTAACTTTCATTTCTTTACTGTTTGCAGTTAATGTTCATGTTCTGCTATGCAAT CGTTTATATGCACGTTTCTTTAATTTTTTTAGATTTTCCTGGATGTATAGTTTAAACAACAAAAAGTCTATTTAA AACTGTAGCAGTAGTTTACAGTTCTAGCAAAGAGGAAAGTTGTGGGGGTTAAACTTTGTATTTCTTATAGA GGCTTCTAAAAAGGTATTTTTATATGTTCTTTTTAACAAATATTGTGTACAACCTTTAAAACATCAATGTTTGGA TCAAAACAAGACCCAGCTTATTTTCTGCTTGCTGTAAATTAAGCAAACATGCTATAATAAAAACAAAATGAAGG

947/2682 FIGURE 874

MSRYLRPPNTSLFVRNVADDTRSEDLRREFGRYGPIVDVYVPLDFYTRRPRGFAYVQFEDVRDAEDALHNLDRKW ICGRQIEIQFAQGDRKTPNQMKAKEGRNVYSSSRYDDYDRYRRSRSSYERRRSRSSFDYNYRRSYSPRNSRPT GRPRRSRSHSDNDRFKHRNRSFSRSKSNSRSRSKSQPKKEMKAKSRSRSASHTKTRGTSKTDSKTHYKSGSRYEK ESRKKEPPRSKSQSRSQSRSRSKSRSRSWTSPKSSGH

948/2682 FIGURE 875

CAGTCCCCAAACCTAGAAATAAACTATTGGTATATTCTGGTGAATTTCCTGTTTTCCCTTTCTGTCTTTTTCTATT CATTTTTGTTATCTTTTTTTTAAAAAAGGTAACCTAAATGGACTCGTACAGCTTATATGCTTGTACGTTCTGAT GTCCCCCATGTCTTCAGAAATCTTGTTATAGCTGCCTGTGTTCTACTTTTGTGGATGCACTATAATTTACTTAAC TCTCATCTTGATGGATTTTAAGGATGTTTCCAATTTTTTCATACTAGTAAAATAACTCTGCTAAAGATATGAAGC TACTATTGCAGATGAGAATACCTGTCTTTCACCTCAGTTATAATTCTGATATTATAACGCTAAAATCTCTGCAAA TTTG**ATG**GGTGAAAAAGCATCTTATTGTAATTGTAATTTTTGTGTTAGTAAGGTGGAATGTTCTTTTTATATTT TTTGTACTGGTCATATTTTAAGGAACGTGATAAAGAAGTAAGCGATGATGAGGCTGAAGAAAAGGAAGACAAAGA AGAAGAAAAGAAAAGAAGAGAGAGAGAGAGACAAACCTGAAATTGAAGATGTTGGTTCTGATGAGGAAGA AGAAAAGAAGGATGGTGACAAGAAGAAGAAGAAGAAGATTAAGGAAAAGTACATCGATCAAGAAGAGCTCAACAA AACAAAGCCCATCTGGACCAGAAATCCCGACGATATTACTAATGAGGAGTACGGAGAATTCTATAAGAGCTTGAC CAATGACTGGGAAGATCACTTGGCAGTGAAGCATTTTTCAGTTGAAGGACAGTTGGAATTCAGAGCCCTTCTATT AGTTTTCATCATGGATAACTGTGAGGAGCTAATCCCTGAATATCTGAACTTCATTAGAGGGGTGGTAGACTCGGA GGATCTCCCTCTAAACATATCCCGTGAGATGTTGCAACAAAGCAAAATTTTGAAAGTTATCAGGAAGAATTTGGT CAAAAAATGCTTAGAACTCTTTACTGAACTGGCGGAAGATAAAGAGAACTACAAGAAATTCTATGAGCAGTTCTC TAAAAACATAAAGCTTGGAATACACGAAGACTCTCAAAATCGGAAGAAGCTTTCAGAGCTGTTAAGGTACTACAC ATCTGCCTCTGGTGATGAGATGGTTTCTCTCAAGGACTACTGCACCAGAATGAAGGAGAACCAGAAACATATCTA TTATATCACAGGTGAGACCAAGGACCAGGTAGCTAACTCAGCCTTTGTGGAACGTCTTCGGAAACATGGCTTAGA AGTGATCTATATGATTGAGCCCATTGATGAGTACTGTGTCCAACAGCTGAAGGAATTTGAGGGGAAGACTTTAGT GTTTGAGAACCTCTGCAAAATCATGAAAGACATATTGGAGAAAAAAGTTGAAAAAGGTGGTTGTCAAACCGATT GGTGACATCTCCATGCTGTATTGTCACAAGCACATATGGCTGGACAGCAAACATGGAGAGAATCATGAAAGCTCA AGCCCTAAGAGACAACTCAACAATGGGTTACATGGCAGCAAAGAAACACCTGGAGATAAACCCTGACCATTCCAT TATTGAGACCTTAAGGCAAAAGGCAGAGGCTGATAAGAACGACAAGTCTGTGAAGGATCTGGTCATCTTGCTTTA TGAAACTGCGCTCCTGTCTTCTGGCTTCAGTCTGGAAGATCCCCAGACACATGCTAACAGGATCTACAGGATGAT CAAACTTGGTCTGGGTATTGATGAAGATGACCCTACTGCTGATGATACCAGTGCTGCTGTAACTGAAGAAATGCC ${\tt ACCCCTTGAAGGAGATGACGACATCACGCATGGAAGAAGTAGAC{\tt TAA}{\tt TCTCTGGCTGAGGGATGACTTACCTG}$ TTCAGTACTCTACAATTCCTCTGATAATATTTTTCAAGGATGTTTTTCTTTATTTTTGTTAATATTAAAAAGTC TGTATGGCATGACAACTACTTTAAGGGGAAGATAAGATTTCTGTCTACTAAGTGATGCTGTGATACCTTAGGCAC TAAAGCAGAGCTAGTAATGCTTTTTGAGTTTCATGTTGGTTTATTTTCACAGATTGGGGTAACGTGCACTGTAAG ACGTATGTAACATGATGTTAACTTTGTGTGGTCTAAAGTGTTTAGCTGTCAAGCCGGATGCCTAAGTAGACCAAA TCTTGTTATTGAAGTGTTCTGAGCTGTATCTTGATGTTTAGAAAAGTATTCGTTACATCTTGTAGGATCTACTTT TTGAACTTTCATTCCCTGTAGTTGACAATTCTGCATGTACTAGTCCTCTAGAAATAGGTTAAACTGAAGCAACT TGATGGAAGGATCTCTCCACAGGGCTTGTTTTCCAAAGAAAAGTATTGTTTGGAGGAGCAAAGTTAAAAGCCTAC TTCTGCTTAAAGTTGTAACAAATACAGATGAGT

949/2682 FIGURE 876

MGEKASYCNCNFCVSKVECSFLYFLYWSYFKERDKEVSDDEAEEKEDKEEEKEKEEEEDKPEIEDVGSDEEEE KKDGDKKKKKKIKEKYIDQEELNKTKPIWTRNPDDITNEEYGEFYKSLTNDWEDHLAVKHFSVEGQLEFRALLFV PRRAPFDLFENRKKKNNIKLYVRRVFIMDNCEELIPEYLNFIRGVVDSEDLPLNISREMLQQSKILKVIRKNLVK KCLELFTELAEDKENYKKFYEQFSKNIKLGIHEDSQNRKKLSELLRYYTSASGDEMVSLKDYCTRMKENQKHIYY ITGETKDQVANSAFVERLRKHGLEVIYMIEPIDEYCVQQLKEFEGKTLVSVTKEGLELPEDEEEKKKQEEKKTKF ENLCKIMKDILEKKVEKVVVSNRLVTSPCCIVTSTYGWTANMERIMKAQALRDNSTMGYMAAKKHLEINPDHSII ETLRQKAEADKNDKSVKDLVILLYETALLSSGFSLEDPQTHANRIYRMIKLGLGIDEDDPTADDTSAAVTEEMPPLEGDDDTSRMEEVD

950/2682 FIGURE 877

951/2682 FIGURE 878

 ${\tt MWLQSLLLLGTVACSISAPARSPSPSTQPWEHVNAIQEARRLLNLSRDTAAEMNETVEVISEMFDLQEPTCLQTRLELYKQGLRGSLTKLKGPLTMMASHYKQHCPPTPETSCATQTITFESFKENLKDFLLVIPFDCWEPVQE}$

952/2682 FIGURE 879

953/2682 FIGURE 880

MQPFLLLLAFLLTPGAGTEEIIGGHEAKPHSRPYMAFVQFLQEKSRKRCGGILVRKDFVLTAAHCQGSSINVTLG AHNIKEQERTQQFIPVKRPIPHPAYNPKNFSNDIMLLQLERKAKWTTAVRPLRLPSSKAQVKPGQLCSVAGWGYV SMSTLATTLQEVLLTVQKDCQCERLFHGNYSRATEICVGDPKKTQTGFKGDSGGPLVCKDVAQGILSYGNKKGTP PGVYIKVSHFLPWIKRTMKRL

954/2682 FIGURE 881A

CCCGGATTTTGCGGGGTTCGTCGGGCCTGTGGAAGAAGCCCCGCCACGGACTTCGGCAGAGGTAGAGCAGGTCTC TCAGCCATCCAGAATCGGTTCAAGTATGCTCGGGTCACTCCTGACACAGACTGGGCCCGCTTGCTGCAGGACCAC CCCTGGCTGCTCAGCCAGAACTTGGTAGTCAAGCCAGACCAGCTGATCAAACGTCGTGGAAAACTTGGTCTCGTT GGGGTCGACCTCACTCTGGATGGGGTCAAGTCCTGGCTGAAGCCACGGCTGGGACAGGAAGCCACAGTTGGCAAG GCCACAGGCTTCCTCAAGAACTTTCTGATCGAGCCCTTCGCCCCCCACAGTCAGGCTGAGGAGTTCTATGTCTGC ATCTATGCCACCCGAGAAGGGGACTACGTCCTGTTCCACCACGAGGGGGGTGTGGACGTGGGTGATGTGGACGCC AAGGCCCAGAAGCTGCTTGTTGGCGTGGATGAGAAACTGAATCCTGAGGACATCAAAAAACACCTGTTGGTCCAC GCCCCTGACGACAAGAAAGAAATTCTGGCCAGTTTTATCTCCGGCCTCTTCAATTTCTACGAGGACTTGTACTTC ACCTACCTCGAGATCAATCCCCTTGTAGTGACCAAAGATGGAGTCTATGTCCTTGACTTGGCGGCCAAGGTGGAC CCAGAGGAAGCCTACATTGCAGACCTCGATGCCAAAAGTGGGGCAAGCCTGAAGCTGACCTTGCTGAACCCCAAA GGGAGGATCTGGACCATGGTGGCCGGGGGTGGCGCCTCTGTCGTGTACAGCGATACCATCTGTGATCTAGGGGGT GTCAACGAGCTGGCAAACTATGGGGAGTACTCAGGCGCCCCCAGCGAGCAGCAGACCTATGACTATGCCAAGACT ATCCTCTCCTCATGACCCGAGAGAAGCACCCAGATGGCAAGATCCTCATCATTGGAGGCAGCATCGCAAACTTC ACCAACGTGGCTGCCACGTTCAAGGGCATCGTGAGAGCAATTCGAGATTACCAGGGCCCCCTGAAGGAGCACGAA GTCACAATCTTTGTCCGAAGAGGTGGCCCCAACTATCAGGAGGGCTTACGGGTGATGGGAAAGTCGGGAAGACC ACTGGGATCCCCATCCATGTCTTTGGCACAGAGACTCACATGACGGCCATTGTGGGCATGGCCTGGGCACCGGCC ATCCCCAACCAGCCACCCACAGCGGCCCACACTGCAAACTTTCTCCTCAACGCCCAGCGGGAGACATCGACTCCA GCCCCCAGCAGGACAGCATCTTTTTATGAGTCCATGGTCGATGAGGTCAGGGCCGATGAGGTGGCGCCTGCAAAG AAGGCCAAGCCTGCCATGCCACAAGATTCAGTCCCAAGTCCAAGATCCCTGCAAGGAAAGAGCACCACCCTCTTC AGCCGCCACACCAAGGCCATTGTGTGGGGCATGCAGACCCGGGCCGTGCAAGGCATGCTGGACTTTGACTATGTC TGCTCCCGAGACGAGCCCTCAGTGGCTGCCATGGTCTATCCTTTCACTGGGGACCACAAGCAGAAGTTTTACTGG GGGCACAAAGAGATCCTGATCCCTGTCTTCAAGAACATGGCTGATGCCATGAGGAAGCACCCGGAGGTAGATGTG CTCATCAACTTTGCCTCTCCCGCTCTGCCTATGACAGCACCATGGAGACCATGAACTATGCCCAGATCCGGACC ATCGCCATCATAGCTGAAGGCATCCCTGAGGCCCTCACGAGAAAGCTGATCAAGAAGGCGGACCAGAAGGGAGTG ACCATCATCGGACCTGCCACTGTTGGAGGCATCAAGCCTGGGTGCTTTAAGATTGGCAACACAGGTGGGATGCTG GACAACATCCTGGCCTCCAAACTGTACCCCCAGGCAGCTGTGGCCTATGTCTCACGTTCCGGAGGCATGTCCAAC GAGCTCAACAATATCATCTCTCGGACCACGGATGGCGTCTATGAGGGCGTGGCCATTGGTGGGGACAGGTACCCG GGCTCCACATTCATGGATCATGTGTTACGCTATCAGGACACTCCAGGAGTCAAAATGATTGTGGTTCTTGGAGAG ATTGGGGGCACTGAGGAATATAAGATTTCCCGGGGCATCAAGGAGGGCCGCCTCACTAAGCCCATCGTCTGCTGG TGCATCGGGACGTGTGCCACCATGTTCTCCTCTGAGGTCCAGTTTGGCCATGCTGGAGCTTGTGCCAACCAGGCT GGAGAGATCATCCAGTCTGTATACGAAGATCTCGTGGCCAATGGAGTCATTGTACCTGCCCAGGAGGTGCCGCCC ATCTGCGATGAGCGAGGACAGGAGCTCATCTACGCGGGCATGCCCATCACTGAGGTCTTCAAGGAAGAGATGGGC ATTGGCGGGGCCCTCGGCCTCCTCTGGTTCCAGAAAAGGTTGCCTAAGTACTCTTGCCAGTTCATTGAGATGTGT CTGATGGTGACAGCTGATCACGGGCCAGCCGTCTCTGGAGCCCACAACACCATCATTTGTGCGCGCACCGCGGTG GAGCTGGTCTCCAGCCTCACCTCGGGGCTGCTCACCATCGGGGATCGGTTTGGGGGTGCCTTGGATGCAGCAGCC CTGATCATGGGCATTGGTCACCGAGTGAAGTCGATAAACAACCCAGACATGCGAGTGCAGATCCTCAAAGATTAC GTCAGGCAGCACTTCCCTGCCACTCCTCTGCTCGATTATGCACTGGAAGTAGAGAAGATTACCACCTCGAAGAAG CCAAATCTTATCCTGAATGTAGATGGTCTCATCGGAGTCGCATTTGTAGACATGCTTAGAAACTGTGGGTCCTTT ACTCGGGAGGAAGCTGATGAATATTGACATTGGAGCCCTCAATGGCATCTTTGTGCTGGGAAGGAGTATGGGG TTCATTGGACACTATCTTGATCAGAAGAGGCTGAAGCAGGGGCTGTATCGTCATCCGTGGGATGATATTTCATAT GTTCTTCCGGAACACATGAGCATG<u>TAA</u>CAGAGCCAGGAACCCTACTGCAGTAAACTGAAGACAAGAACTCTTCCC GGGTACAGGCACÇGAAGACCAACATCCACAGGCTAACACCCCTTCAGTCCACACAAAGAAGCTTCATATTTTTTT

955/2682 FIGURE 881B

956/2682 FIGURE 882

MSAKAISEQTGKELLYKFICTTSAIQNRFKYARVTPDTDWARLLQDHPWLLSQNLVVKPDQLIKRRGKLGLVGVD
LTLDGVKSWLKPRLGQEATVGKATGFLKNFLIEPFAPHSQAEEFYVCIYATREGDYVLFHHEGGVDVGDVDAKAQ
KLLVGVDEKLNPEDIKKHLLVHAPDDKKEILASFISGLFNFYEDLYFTYLEINPLVVTKDGVYVLDLAAKVDATA
DYICKVKWGDIEFPPPFGRVAYPEEAYIADLDAKSGASLKLTLLNPKGRIWTMVAGGGASVVYSDTICDLGGVNE
LANYGEYSGAPSEQQTYDYAKTILSLMTREKHPDGKILIIGGSIANFTNVAATFKGIVRAIRDYQGPLKEHEVTI
FVRRGGPNYQEGLRVMGEVGKTTGIPIHVFGTETHMTAIVGMAWAPAIPNQPPTAAHTANFLLNAQRETSTPAPS
RTASFYESMVDEVRADEVAPAKKAKPAMPQDSVPSPRSLQGKSTTLFSRHTKAIVWGMQTRAVQGMLDFDYVCSR
DEPSVAAMVYPFTGDHKQKFYWGHKEILIPVFKNMADAMRKHPEVDVLINFASLRSAYDSTMETMNYAQIRTIAI
IAEGIPEALTRKLIKKADQKGVTIIGPATVGGIKPGCFKIGNTGGMLDNILASKLYPQAAVAYVSRSGGMSNELN
NIISRTTDGVYEGVAIGGDRYPGSTFMDHVLRYQDTPGVKMIVVLGEIGGTEEYKISRGIKEGRLTKPIVCWCIG
TCATMFSSEVQFGHAGACANQASETAVAKNQALKEAGVFVPRSFDELGEIIQSVYEDLVANGVIVPAQEVPPPTV
PMDYSWARELGLIRKPASFMTSICDERGQELIYAGMPITEVFKEEMGIGGALGLLWFQKRLPKYSCQFIEMCLMV
TADHGPAVSGAHNTIICARTAVELVSSLTSGLLTIGDRFGGALDAAAKMFSKAFDSGIIPMEFVNKMKKEGKLIM
GIGHRVKSINNPDMRVQILKDYVRQHFPATPLLDYALEVEKITTSKKPNLILNVDGLIGVAFVDMLRNCGSFTRE
EADEYIDIGALNGIFVLGRSMGFIGHYLDQKRLKQGLYRHPWDDISYVLPEHMSM

957/2682 FIGURE 883

AAGTTCATGCTAGGGGTGCTGAGGAACAAGGCTGTCCTAGGATTGGACCCTCCATCCTGGACAGGGGTCCTGGGG AGGATGAGGCTGAGGCCTGGATGATCAGTCTCTTTTTGGTTTCATGATCATTTAAAAAAACAGAAAAGACAAACAT $\verb|TTCACAGTCTTTAAAAAATAGAAGTCTGAGGAGAGAGACCAGAGTCCTGGGCCCCGGGAGGCCCCTCGAGGCCTC| \\$ $\texttt{CACCCCAGCAACC} \\ \underline{\textbf{ATG}} \\ \texttt{TCCAAGGGACCTGCAGTTGGTATTGATCTTGGCACCACCTACTCTTGTGTGGGTGTTTT} \\$ CCAGCACGGAAAAGTCGAGATAATTGCCAATGATCAGGGAAACCGAACCACTCCAAGCTATGTCGCCTTTACGGA CACTGAACGGTTGATCGGTGATGCCGCAAAGAATCAAGTTGCAATGAACCCCACCAACACAGTTTTTGATGCCAA ACGTCTGATTGGACGCAGATTTGATGATGCTGTTGTCCAGTCTGATATGAAACATTGGCCCTTTATGGTGGTGAA TGATGCTGGCAGGCCCAAGGTCCAAGTAGAATACAAGGGAGAGACCAAAAGCTTCTATCCAGAGGAGGTGTCTTC TATGGTTCTGACAAAGATGAAGGAAATTGCAGAAGCCTACCTTGGGAAGACTGTTACCAATGCTGTGGTCACAGT GCCAGCTTACTTTAATGACTCTCAGCGTCAGGCTACCAAAGATGCTGGAACTATTGCTGGTCTCAATGTACTTAG CATCTTTGACCTGGGAGGTGGCACTTTTGATGTGTCAATCCTCACTATTGAGGATGGAATCTTTGAGGTCAAGTC TACAGCTGGAGACACCCACTTGGGTGGAGAAGATTTTGACAACCGAATGGTCAACCATTTTATTGCTGAGTTTAA GCGCAAGCATAAGAAGGACATCAGTGAGAACAAGAGAGCTGTAAGACGCCTCCGTACTGCTTGTGAACGTGCTAA GCGTACCCTCTCTCCAGCACCCAGGCCAGTATTGAGATCGATTCTCTCTATGAAGGAATCGACTTCTATACCTC CATTACCCGTGCCCGATTTGAAGAACTGAATGCTGACCTGTTCCGTGGCACCCTGGACCCAGTAGAAAAGCCCT TCAGAAGCTTCTCCAAGACTTCTTCAATGGAAAAGAACTGAATAAGAGCATCAACCCTGATGAAGCTGTTGCTTA TGGTGCAGCTGTCCAGGCAGCCATCTTGTCTGGAGACAAGTCTGAGAATGTTCAAGATTTGCTGCTCTTGGATGT CACTCCTCTTCCCTTGGTATTGAAACTGCTGGTGGAGTCATGACTGTCCTCATCAAGCGTAATACCACCATTCC TACCAAGCAGACACAGACCTTCACTACCTATTCTGACAACCAGCCTGGTGTGCTTATTCAGGTTTATGAAGGCGA GCGTGCCATGACAAAGGATAACAACCTGCTTGGCAAGTTTGAACTCACAGGCATACCTCCTGCACCCCGAGGTGT TCCTCAGATTGAAGTCACTTTTGACATTGATGCCAATGGTATACTCAATGTCTCTGCTGTGGACAAGAGTACGGG AAAAGAGAACAAGATTACTATCACTAATGACAAGGGCCGTTTGAGCAAGGAAGACATTGAACGTATGGTCCAGGA AGCTGAGAAGTACAAAGCTGAAGATGAGAAGCAGAGGGGACAAGGTGTCATCCAAGAATTCACTTGAGTCCTATGC CTTCAACATGAAAGCAACTGTTGAAGATGAGAAACTTCAAGGCAAGATTAACGATGAGGACAAACAGAAGATTCT GAAAGAGCTGGAGAAAGTTTGCAACCCCATCATCACCAAGCTGTACCAGAGTGCAGGAGGCATGCCAGGAGGAAT GCCTGGGGGATTTCCTGGTGGTGGAGCTCCTCCTCTGGTGGTGCTTCCTCAGGGCCCACCATTGAAGAGGTTGA T<u>TAAGCCAACCAAGTGTAGATGTAGCATTGTTCCACACA</u>TTTAAAACATTTGAAGGACCTAAATTCGTAGCAAAT ${\tt TCTGTGGCAGTTTTAAAAAGTTAAGCTGCTATAGTAAGTTACTGGGCATTCTCAATACTTGAATATGGAACATAT$

958/2682 FIGURE 884

MSKGPAVGIDLGTTYSCVGVFQHGKVEIIANDQGNRTTPSYVAFTDTERLIGDAAKNQVAMNPTNTVFDAKRLIG RRFDDAVVQSDMKHWPFMVVNDAGRPKVQVEYKGETKSFYPEEVSSMVLTKMKEIAEAYLGKTVTNAVVTVPAYF NDSQRQATKDAGTIAGLNVLRIINEPTAAAIAYGLDKKVGAERNVLIFDLGGGTFDVSILTIEDGIFEVKSTAGD THLGGEDFDNRMVNHFIAEFKRKHKKDISENKRAVRRLRTACERAKRTLSSSTQASIEIDSLYEGIDFYTSITRA RFEELNADLFRGTLDPVEKALRDAKLDKSQIHDIVLVGGSTRIPKIQKLLQDFFNGKELNKSINPDEAVAYGAAV QAAILSGDKSENVQDLLLLDVTPLSLGIETAGGVMTVLIKRNTTIPTKQTQTFTTYSDNQPGVLIQVYEGERAMT KDNNLLGKFELTGIPPAPRGVPQIEVTFDIDANGILNVSAVDKSTGKENKITITNDKGRLSKEDIERMVQEAEKY KAEDEKQRDKVSSKNSLESYAFNMKATVEDEKLQGKINDEDKQKILDKCNEIINWLDKNQTAEKEEFEHQQKELE KVCNPIITKLYQSAGGMPGGMPGGFPGGGAPPSGGASSGPTIEEVD

959/2682 FIGURE 885

TGAAGATCAGCTATTAGAAGAAGAACATCAGTTAAGTCCTTTGGACCTGATCAGCTTGATACAAGAACTACTGAT ${\tt TTCAACTTCTTTGGCTTAATTCTCTCGGAAACG} {\tt ATG} {\tt AAATATACAAGTTATATCTTGGCTTTTCAGCTCTGCATC}$ GTTTTGGGTTCTCTTGGCTGTTACTGCCAGGACCCATATGTAAAAGAAGCAGAAAACCTTAAGAAATATTTTAAT GCAGGTCATTCAGATGTAGCGGATAATGGAACTCTTTTCTTAGGCATTTTGAAGAATTGGAAAGAGGAGAGTGAC AGAAAATAATGCAGAGCCAAATTGTCTCCTTTTACTTCAAACTTTTTAAAAAACTTTAAAGATGACCAGAGCATC CAAAAGAGTGTGGAGACCATCAAGGAAGACATGAATGTCAAGTTTTTCAATAGCAACAAAAAGAAACGAGATGAC TTCGAAAAGCTGACTAATTATTCGGTAACTGACTTGAATGTCCAACGCAAAGCAATACATGAACTCATCCAAGTG ATGGCTGAACTGTCGCCAGCAGCTAAAACAGGGAAGCGAAAAAGGAGTCAGATGCTGTTTCAAGGTCGAAGAGCA TCCCAGTAATGGTTGTCCTGCCTGCAATATTTGAATTTTAAATCTAAATCTATTTAATATTTAACATTATTT ATATGGGGAATATATTTTTAGACTCATCAATCAAATAAGTATTTATAATAGCAACTTTTGTGTAATGAAAATGAA TATCTATTAATATGTATTATTATAATTCCTATATCCTGTGACTGTCTCACTTAATCCTTTGTTTTCTGACTA ATTAGGCAAGGCTATGTGATTACAAGGCTTTATCTCAGGGGCCAACTAGGCAGCCAACCTAAGCAAGATCCCATG GGTTGTGTGTTTATTTCACTTGATGATACAATGAACACTTATAAGTGAAGTGATACTATCCAGTTACTGCCGGTT ATGAAAACATAGCATCTCAGGAGATTTCATGCCTGGTGCTTCCAAATATTGTTGACAACTGTGACTGTACCCAAA

960/2682 FIGURE 886

 $\label{thm:mkytsyilafqlcivlgslgcycqdpyvkeaenlkkyfnaghsdvadngtlflgilknwkeesdrkimqsqivsfyklfknfkddgsiqksvetikedmnvkffnsnkkkrddfekltnysvtdlnvqrkaiheliqvmaelspaaktgkrkrsqmlfqgrrasq$

961/2682 FIGURE 887

TTTAACAGGAGAAATCAATGGTTCTGCCAATTATGAGATGTTTATATTTCACAACGGAGGTGTACAAATTTTATG CAAATATCCTGACATTGTCCAGCAATTTAAAATGCAGTTGCTGAAAGGGGGGCAAATACTCTGCGATCTCACTAA GACAAAAGGAAGTGGAAACACAGTGTCCATTAAGAGTCTGAAATTCTGCCATTCTCAGTTATCCAACAACAGTGT CTCTTTTTTTCTATACAACTTGGACCATTCTCATGCCAACTATTACTTCTGCAACCTATCAATTTTTGATCCTCC TCCTTTTAAAGTAACTCTTACAGGAGGATATTTGCATATTTATGAATCACAACTTTGTTGCCAGCTGAAGTTCTG GTTACCCATAGGATGTGCAGCCTTTGTTGTAGTCTGCATTTTGGGATGCATACTTATTTGTTGGCTTACAAAAA GAAGTATTCATCCAGTGTGCACGACCCTAACGGTGAATACATGTTCATGAGAGCAGTGAACACAGCCAAAAAATC ${\tt TAGACTCACAGATGTGACCCTA} \underline{{\tt TAA}} {\tt TATATGGAACTCTGGCACCCAGGCATGAAGCACGTTGGCCAGTTTTCCTCAA}$ TTGTTCAATCTGGAAGAATGACTGTATCAGTCAATGGGGATTTTAACAGACTGCCTTGGTACTGCCGAGTCCTCT CAAAACAACACCCTCTTGCAACCAGCTTTGGAGAAAGCCCAGCTCCTGTGTGCTCACTGGGAGTGGAATCCCTG AGGGGTACTGAATCTGCAAAGCAAATGAGCAGCCAAGGACCAGCATCTGTCCGCATTTCACTATCATACTACCTC TTCTTTCTGTAGGGATGAGAATTCCTCTTTTAATCAGTCAAGGGAGATGCTTCAAAGCTGGAGCTATTTTATTTC TGAGATGTTGATGTGAACTGTACATTAGTACATACTCAGTACTCCTTCAATTGCTGAACCCCAGTTGACCATT TTACCAAGACTTTAGATGCTTTCTTGTGCCCTCAATTTTCTTTTTAAAAATACTTCTACATGACTGCTTGACAGC CCAACAGCCACTCTCAATAGAGAGCTATGTCTTACATTCTTTCCTCTGCTGCTCAATAGTTTTATATATCTATGC ATACATATATACACACATATGTATATAAAATTCATAATGAATATATTTGCCTATATTCTCCCTACAAGAATATTT TTGCTCCAGAAAGACATGTTCTTTTCTCAAATTCAGTTAAAATGGTTTACTTTGTTCAAGTTAGTGGTAGGAAAC • ATTGCCCGGAATTGAAAGCAAATTTATTTATTATCCTATTTTCTACCATTATCTATGTTTTCATGGTGCTATTA TGGGGTAGAGCAGAATATTCATTTAGCCTGAAAGCTGCAGTTACTATAGGTTGCTGTCAGACTATACCCATGGTG CCTCTGGGCTTGACAGGTCAAAATGGTCCCCATCAGCCTGGAGCAGCCCTCCAGACCTGGGTGGAATTCCAGGGT TGAGAGACTCCCCTGAGCCAGAGGCCACTAGGTATTCTTGCTCCCAGAGGCTGAAGTCACCCTGGGAATCACAGT GGTCTACCTGCATTCATAATTCCAGGATCTGTGAAGAGCACATATGTGTCAGGGCACAATTCCCTCTCATAAAAA CCACACAGCCTGGAAATTGGCCCTGGCCCTTCAAGATAGCCTTCTTTAGAATATGATTTGGCTAGAAAGATTCTT AAATATGTGGAATATGATTATTCTTAGCTGGAATATTTTCTCTACTTCCTGTCTGCATGCCCAAGGCTTCTGAAG CAGCCAATGTCGATGCAACAACATTTGTAACTTTAGGTAAACTGGGATTATGTTGTAGTTTAACATTTTGTAACT GTGTGCTTATAGTTTACAAGTGAGACCCGATATGTCATTATGCATACTTATATTATCTTAAGCATGTGTAATGCT GGATGTGTACAGTACAGTACTTAACTTGTAATTTGAATCTAGTATGGTGTTCTGTTTTCAGCTGACTTGGACAAC CCTTCATGGTGGCCCACCTGGCCTGGTTGTCCAAGCTGTGCCTCGACACATCCTCATCCCAAGCATGGGACACCT CAAGATGAATAATTAATTCACAAAATTTCTGTGAAATCAAATCCAGTTTTAAGAGGAGCCACTTATCAAAGAGATT

962/2682 FIGURE 888

MKSGLWYFFLFCLRIKVLTGEINGSANYEMFIFHNGGVQILCKYPDIVQQFKMQLLKGGQILCDLTKTKGSGNTV SIKSLKFCHSQLSNNSVSFFLYNLDHSHANYYFCNLSIFDPPPFKVTLTGGYLHIYESQLCCQLKFWLPIGCAAF VVVCILGCILICWLTKKKYSSSVHDPNGEYMFMRAVNTAKKSRLTDVTL

963/2682 FIGURE 889

 ${\tt GGCACGAGGGTCCGCAAGCCCGGCTGAGAGCGCGCC} \underline{{\tt ATG}} {\tt GGCAGGGGGGCTGCAAGGGGCTCTGCCTGTCGCTG}$ TTCGACTACAAGACCGAGAAGTATGTCATCGCCAAGAACAAGAAGGTGGGCCTGCTGTACCGGCTGCTGCAGGCC TCCATCCTGGCGTACCTGGTCGTATGGGTGTTCCTGATAAAGAAGGGTTACCAAGACGTCGACACCTCCCTGCAG AGTGCTGTCATCACCAAAGTCAAGGGCGTGGCCTTCACCAACACCTCGGATCTTGGGCAGCGGATCTGGGATGTC GCCGACTACGTCATTCCAGCCCAGGGAGAACGTCTTTTTTGTGGTCACCAACCTGATTGTGACCCCCAACCAG CGGCAGAACGTCTGTGCTGAGAATGAAGGCATTCCTGATGGCGCGTGCTCCAAGGACAGCGACTGCCACGCTGGG GAGATCTTTGCCTGGTGCCCGTTGGAGACAAGCTCCAGGCCGGAGGAGCCATTCCTGAAGGAGGCCGAAGACTTC ACCATTTTCATAAAGAACCACATCCGTTTCCCCAAATTCAACTTCTCCAAAAACAATGTGATGGACGTCAAGGAC AGATCTTTCCTGAAATCATGCCACTTTGGCCCCAAGAACCACTACTGCCCCATCTTCCGACTGGGCTCCATCGTC CGCTGGGCCGGGAGCGACTTCCAGGATATAGCCCTGCGAGGTGGCGTGATAGGAATTAATATTGAATGGAACTGT GATCTTGATAAAGCTGCCTCTGAGTGCCACCCTCACTATTCTTTTAGCCGTCTGGACAATAAACTTTCAAAGTCT GTCTCCTCCGGGTACAACTTCAGATTTGCCAGATATTACCGAGACGCAGCCGGGGTGGAGTTCCGCACCCTGATG AAAGCCTACGGGATCCGCTTTGACGTGATGGTGAACGGCAAGGGTGCTTTCTTCTGCGACCTGGTACTCATCTAC CTCATCAAAAAGAGAGATTTTACCGTGACAAGAAGTACGAGGAAGTGAGGGGCCTAGAAGACAGTTCCCAGGAG GCCGAGGACGAGGCATCGGGGCTGGGGCTATCTGAGCAGCTCACATCTGGGCCAGGGCTGCTGGGGATGCCGGAG CAGCAGGAGCTGCAGGAGCCACCCGAGGCGAAGCGTGGAAGCAGCAGTCAGAAGGGGAACGGATCTGTGTGCCCA CAGCTCCTGGAGCCCCACAGGAGCACG**TGA**ATTGCCTCTGCTTACGTTCAGGCCCTGTCCTAAACCCAGCCGTCT AGCACCCAGTGATCCCATGCCTTTGGGAATCCCAGGATGCTGCCCAACGGGAAATTTGTACATTGGGTGCTATCA GAACGGGTTGTAAATGGGGAACATGACTTCCTTCCGGAGTCCTTGAGCACCTCAGCTAAGGACCGCAGTGCCCTG TAGAGTTCCTAGATTACCTCACTGGGAATAGCATTGTGCGTGTCCGGAAAAGGGCTCCATTTGGTTCCAGCCCAC CCACCTTCCTGCCAGCTGTTTGCCCTTAGGCCAGTACACAGAATTAAAGTGGGGGAGATGGCAGACGCTTTCTGG **ААААААААААААААААААААА**

964/2682 FIGURE 890

MGQAGCKGLCLSLFDYKTEKYVIAKNKKVGLLYRLLQASILAYLVVWVFLIKKGYQDVDTSLQSAVITKVKGVAF
TNTSDLGQRIWDVADYVIPAQGENVFFVVTNLIVTPNQRQNVCAENEGIPDGACSKDSDCHAGEAVTAGNGVKTG
RCLRRGNLARGTCEIFAWCPLETSSRPEEPFLKEAEDFTIFIKNHIRFPKFNFSKNNVMDVKDRSFLKSCHFGPK
NHYCPIFRLGSIVRWAGSDFQDIALRGGVIGINIEWNCDLDKAASECHPHYSFSRLDNKLSKSVSSGYNFRFARY
YRDAAGVEFRTLMKAYGIRFDVMVNGKGAFFCDLVLIYLIKKREFYRDKKYEEVRGLEDSSQEAEDEASGLGLSE
QLTSGPGLLGMPEQQELQEPPEAKRGSSSQKGNGSVCPQLLEPHRST

965/2682 FIGURE 891

GCACTATGGTGTGTGGGACAACAGTGAGTATATGCGGAATGGAGACTTCTTACCCACCAGGCTGCAGGCCCAGC AGGATGCTGTCAACATAGTTTGTCATTCAAAGACCCGCAGCAACCCTGAGAACAACGTGGGCCTTATCACACTGG CTAATGACTGTGAAGTGCTGACCACACTCACCCCAGACACTGGCCGTATCCTGTCCAAGCTACATACTGTCCAAC CCAAGGGCAAGATCACCTTCTGCACGGGCATCCGCGTGGCCCATCTGGCTCTGAAGCACCGACAAGGCAAGAATC ACAAGATGCGCATCATTGCCTTTGTGGGAAGCCCAGTGGAGGACAATGAGAAGGATCTGGTGAAACTGGCTAAAC GCCTCAAGAAGGAGAAAGTAAATGTTGACATTATCAATTTTGGGGAAGAGGGGGGAACACAGAAAAGCTGACAG CCTTTGTAAACACGTTGAATGGCAAAGATGGAACCGGTTCTCATCTGGTGACAGTGCCTCCTGGGCCCAGTTTGG CTGATGCTCTCATCAGTTCTCCGATTTTGGCTGGTGAAGGTGGTGCCATGCTGGGTCTTGGTGCCAGTGACTTTG AATTTGGAGTAGATCCCAGTGCTGATCCTGAGCTGGCCTTCGTGTATCTATGGAAGAGCAGCGGCAGC GGCAGGAGGAGGAGGCCCGGCGGCAGCTGCAGCTTCTGCTGAGGCCGGGATTGCTACGACTGGGACTGAAG ACTCAGACGATGCCCTGCTGAAGATGACCATCAGCCAGCAAGAGTTTGGCCGCACTGGGCTTCCTGACCTAAGCA GTATGACTGAGGAAGAGCAGATTGCTTATGCCATGCAGATGTCCCTGCAGGGAGCAGAGTTTGGCCAGGCGGAAT AGGACCCCGAGTTCCTTCAGAGTGTCCTAGAGAACCTCCCAGGTGTGGATCCCAACAATGAAGCCATTCGAAATG GGAGGGAAAGGGTAGCTGAGTCTGCTTAGGGGACTGCATGGGAAGCACGGAATATAGGGTTAGATGTGTTATC TGTAACCATTACAGCCTAAATAAAGCTTGGCAACTTTT

966/2682 FIGURE 892

MVLESTMVCVDNSEYMRNGDFLPTRLQAQQDAVNIVCHSKTRSNPENNVGLITLANDCEVLTTLTPDTGRILSKL HTVQPKGKITFCTGIRVAHLALKHRQGKNHKMRIIAFVGSPVEDNEKDLVKLAKRLKKEKVNVDIINFGEEEVNT EKLTAFVNTLNGKDGTGSHLVTVPPGPSLADALISSPILAGEGGAMLGLGASDFEFGVDPSADPELALALRVSME EQRQRQEEEARRAAASAAEAGIATTGTEDSDDALLKMTISQQEFGRTGLPDLSSMTEEEQIAYAMQMSLQGAEF GQAESADIDASSAMDTSEPAKEEDDYDVMQDPEFLQSVLENLPGVDPNNEAIRNAMGSLASQATKDGKKDKKEED KK

967/2682 FIGURE 893

GACAGGGGCAAAGTGACCTGCTTTTGGGGGTGACCGCCGGAGCGCGTGAGCCCTCCCCCTTGGGATCC CGCAGCTGACCAGTCGCGCTGACGGACAGACAGACAGCCCCCAGCCCCAGTTACCACCTCCCCCGGC GTCGGAGCTCGCGGCGTCGCACTGAAACTTTTCGTCCAACTTCTGGGCTGTTCTCGCTTCGGAGGAGCCGTGGTC CGCGCGGGGAAGCCGAGCCGAGCCGCGAGAAGTGCTAGCTCGGGCCGGGAGGAGCCGCAGCCGGAGGAG GGGGAGGAGGAGAAGAAGAAGAGAGAGAGGGGGGCCGCAGTGGCGACTCGGCGCTCGGAAGCCGGGCTCATGG GAGGAAGAGTAGCTCGCCGAGGCGCCGAGGAGAGCGGGCCGCCCCACAGCCCGAGCCGGAGAGGGACGCGAGCCG CGCGCCCGGTCGGGCCTCCGAAACCATGAACTTTCTGCTGTCTTGGGTGCATTGGAGCCTTGCCTTGCTGCTCT ACCTCCACCATGCCAAGTGGTCCCAGGCTGCACCCATGGCAGAAGGAGGAGGGCAGAATCATCACGAAGTGGTGA AGTTCATGGATGTCTATCAGCGCAGCTACTGCCATCCAATCGAGACCCTGGTGGACATCTTCCAGGAGTACCCTG ATGAGATCGAGTACATCTTCAAGCCATCCTGTGTGCCCCTGATGCGATGCGGGGGCTGCTCCAATGACGAGGGCC TGGAGTGTGCCCACTGAGGAGTCCAACATCACCATGCAGATTATGCGGATCAAACCTCACCAAGGCCAGCACA CGATCGATACAGAAACCACGCTGCCGCCACCACACCATCACCATCGACAGAACAGTCCTTAATCCAGAAACCTGA AATGAAGGAAGAGGAGACTCTGCGCAGAGCACTTTGGGTCCGGAGGGCGAGACTCCGGCGGAAGCATTCCCGGGC GGGTGACCCAGCACGGTCCCTCTTGGAATTGGATTCGCCATTTTATTTTTCTTGCTGCTAAATCACCGAGCCCGG TAATGTTATTGGTGTCTTCACTGGATGTATTTGACTGCTGTGGACTTGAGTTGGGAGGGGAATGTTCCCACTCAG CCTCTCCCCTGCCCAAGAATGTGCAAGGCCAGGGCATGGGGGCAAATATGACCCAGTTTTGGGAACACCGACAAA CCCAGCCCTGGCGCTGAGCCTCTCTACCCCAGGTCAGACGGACAGAAAGACAAATCACAGGTTCCGGGATGAGGA CACCGGCTCTGACCAGGAGTTTGGGGAGCTTCAGGACATTGCTGTGCTTTGGGGATTCCCTCCACATGCTGCACG CGCATCTCGCCCCCAGGGGCACTGCCTGGAAGATTCAGGAGCCTGGGCGGCCTTCGCTTACTCTCACCTGCTTCT AGCGCCCCTTCCTGGGACTCGCCCTCATCCTCTTCCTGCTCCCCTTCCTGGGGTGCAGCCTAAAAGGACCTATGT AGAGAAAAGAGAAAGTGTTTTATATACGGTACTTATTTAATATCCCTTTTTAATTAGAAATTAGAACAGTTAATT TAATTAAAGAGTAGGGTTTTTTTTCAGTATTCTTGGTTAATATTTAATTTCAACTATTTATGAGATGTATCTTTT GTGACAGTCACTAGCTTATCTTGAACAGATATTTAATTTTGCTAACACTCAGCTCTGCCCTCCCCGATCCCCTGG TTTGTGTGTATATATATATATATATGTTTATGTATATATGTGATCCTGAAAAAATAAACATCGCTATTCTGTTTT TTGTTATCATTTATTTATTGGTGCTACTGTTTATCCGTAATAATTGTGGGGAAAAGATATTAACATCACGTCTTT TCTTAAAAAAAAAAAAA

968/2682 FIGURE 894

MNFLLSWVHWSLALLLYLHHAKWSQAAPMAEGGGQNHHEVVKFMDVYQRSYCHPIETLVDIFQEYPDEIEYIFKP SCVPLMRCGGCSNDEGLECVPTEESNITMQIMRIKPHQGQHIGEMSFLQHNKCECRPKKDRARQENPCGPCSERR KHLFVQDPQTCKCSCKNTHSRCKARQLELNERTCRCDKPRR

969/2682 FIGURE 895

GTCTACACCAGCGGTGTCGCTGCCCGAAAGTGAGAAGGCTGATATTGCTAGCTGGAATCCAGGCCTGGGTGCT GCATGGTGGCGCCCCTCCCCGTGACCACCGCTGCGTTTTCTCGGGGCTTTCTCTGAGGAGCTGCTCTTGTGCTGTT AGTTGCCAGTCTTAAGGAAGGAATCAATTTCTTTCGCAATAAGAGCACTGGCAAAGACTACGTCTTGTACAAGAA TAAGAGCCGACTGAGGGCATGCAAGAATATGTGCAAGCACCAAGGAGGCCTGTTCATAAAAGATATCGAGGATTT AGCCGGAAGTTGTTGAA<u>ATG</u>GATGAAAACAACGGACTTTTGCTTTTAGAACTGAATCCTCCTAACCCTTGGGACT TCAAGTTAGGAGACAAGAGAATGGTGTTTGACCCTTGGTTAATCGGTCCTGCTTTTGCCCGTGGATGGTGGTTGC TCCATGAGCCTCCATCTGATTGGCTGGAGAGGCTGTGCCAGGCAGACCTCATTTACATCAGTCATCTGCACTCAG ACCACCTGAGTTACCCCACACTGAAAAAGCTTGCTGGGAGAAGACCAGATATTCCCATTTATGTTGGAAACACAG AAAGGCCTGTATTTTGGAATCTGAATCAGAGCGGTGTCCAGTTGACTAATATCAATGTCGTGCCATTTGGAATAT GGCAGCAGGTGGACAAAATCTTCGATTCATGATCTTGATGGACGGTGTTCATCCTGAGATGGACACTTGCATTA TTGTGGAGTACAAAGGTCATAAAATACTCAATATAGTAGACTGCACCAGACCCAATGGGGGAAGGCTGCCTATGA AGGTTGCTCTAATGATGAGTGATTTTGCTGGAGGAGCATCAGGCTTTCCAATGACTTTCAGTGGTGGAAAATTTA CGGAGGAATGGAAAGCCCAATTCATTAAAACAGAAAGGAAGAAGCTCCTGAACTACAAGGCTCGGCTGGTGAAGA ACCTGCAACCCCGAATTTATTGTCCCTTTGCTGGGTATTTTGTGGAATCTCACCCATCAGACAAGTACATCAAGG AAACAAACACCAAAAATGACCCAAATGAACTCAACAATCTTATCAAGAAAAACTCTGATGTGATAACATGGACCC CAGAGGGGACAAAATTTACAAGGATTCCTGGGATTTTGAACCTTATTTGGAAATCTTGAATGCTGCTCTAGGAG ATGAAATATTTCTTCACTCATCCTGGATAAAAGAATACTTCACTTGGGCTGGATTTAAAGATTACAACCTTGTGG TCAGGATGATTGAGACAGATGAGGACTTCAATCCTTTTCCTGGAGGATATGACTATTTGGTTGACTTTTTAGATT TATCCTTCCCAAAAGAAAGACCACAACGAGAACATCCCTATGAGGAAATCCATAGCCGGGTGGATGTCATCAGAC ACGTGGTGAAGAATGGTCTACTCTGGGATGAGTTGTATATAGGATTCCAAACACGGCTCCAGCGGGATCCTGACA TATACCATCACCTGTTTTGGAATCATTTTCAAATAAAACTCCCCCTCACACCCAACCTGGAAGTCATTCCTGA TGTGCTGTGAGCAGAATGGGCCTGCGATTTTGCAAGAATGCAAAACCACA**TGA**AAATTTCAAGAATTCACTGATC TGATGCAAAATAAAAATTTATCATTACATCTTGAACCCAGGAAGCTTACAGCAAAGAGACTATGCTTTATGACGT TGTGGAAAACAAAGCATAGCTGTAGTAGATACGAATCCAATCACAGAGGAAACAGGAAGAGAAAAACATCCAAGA CTACAGTGAAAACTGGAAATGGTCTGTTTTCGTGATATTCGTATGATTAAGATGCAAATTTTTTCTTAGGAAAAT TATTTCTGATTATATATGCTAGGTCTGATTCTGAAGATACAAGAATTCAATGGTGGAATTTGTCTCCTGAAATT TCTAGATTCATAATTAGAAGTGTTTATTACCAACTTCTCACTTAGATTAACATCAGTGATGTTTGATTATTCTGG TTAACCGCTCACATGCATAACAATAATGCTAGAAATTCAGGAATTATAATTTTGTGATTTATACTGTGTGGTAAA TTATTCAGTTCTCACTGCAAATAAATATAATGTATATCAATGTAATGTAGGTCAGAATGTCTATGGTGAGCAAAT AAAAGATTATTTTAAAATATGAAAAAAAAAAAAAAAAA

970/2682 FIGURE 896

MDENNGLLLLELNPPNPWDLQPRSPEELAFGEVQITYLTHACMDLKLGDKRMVFDPWLIGPAFARGWWLLHEPPS
DWLERLCQADLIYISHLHSDHLSYPTLKKLAGRRPDIPIYVGNTERPVFWNLNQSGVQLTNINVVPFGIWQQVDK
NLRFMILMDGVHPEMDTCIIVEYKGHKILNIVDCTRPNGGRLPMKVALMMSDFAGGASGFPMTFSGGKFTEEWKA
QFIKTERKKLLNYKARLVKNLQPRIYCPFAGYFVESHPSDKYIKETNTKNDPNELNNLIKKNSDVITWTPRPGAT
LDLGRMLKDRTDSKGIIEPPEGTKIYKDSWDFEPYLEILNAALGDEIFLHSSWIKEYFTWAGFKDYNLVVRMIET
DEDFNPFPGGYDYLVDFLDLSFPKERPQREHPYEEIHSRVDVIRHVVKNGLLWDELYIGFQTRLQRDPDIYHHLF
WNHFQIKLPLTPPNWKSFLMCCEQNGPAILQECKTT

971/2682 FIGURE 897

GCAGCGCCGCGACTCGTGCGGTAGGCGTCTGCGCTCGGTTTGAGGGCTCGGCGCGGGGTTTCCTGTTCCTCTT $\tt CTGCGCGGCTGCAGCTCGGGACTTCGGCCTGACCCAGCCCCC{\color{red} \underline{ATG}} GCTTCAGAAGAGCTACAGAAGATCTAGAA$ GAGGTAAAGGTGTTGCTGGAAAAGGCTACTAGGAAAAGAGTACGTGATGCCCTTACAGCTGAAAAATCCAAGATT GAGACAGAAATCAAGAACAAGATGCAACAGAAATCACAGAAGAAAGCAGAACTTCTTGATAATGAAAAACCAGCT GTGAAAATCTACATTACCTTAACTGGAGTTCATCAAGTTCCCACTGAGAATGTGCAGGTGCATTTCACAGAGAGG TCATTTGATCTTTTGGTAAAGAATCTAAATGGGAAGAGTTACTCCATGATTGTGAACAATCTCTTGAAACCCATC AGGTGGGATTACCTGACCCAGGTTGAAAAGGAGTGCAAAGAAAAAGAGAAGCCCTCCTATGACACTGAAACAGAT CCTAGTGAGGGATTGATGAATGTTCTAAAGAAAATTTATGAAGATGGAGACGATGATATGAAGCGAACCATTAAT ${\tt AAAGCCTGGGTGGAATCAAGAGGAGGAGGCAAAGGAGGAGACACGGAATTT} \underline{{\tt TGA}}{\tt GACTTTAAAGTCGTTTTGGGA$ ACTGTGATGTGATGTGGAAATACTGATGTTTCCAGTAAGGGAATATTGGTGAGCTGCATATATAAATTTGACAGA ATTCTCACGTGAAATATAAAAAGCAAGTCTTGCCCAATAAAAACGCTACATTGTGTGTATTTTTTTGTTCAGCTAA GAATTGGAAAAGTATTTGCTTGCCTTTTAAGTTACTGACATCAGCTTCCACCAGTGTAAAAATTGAGTAAAACCT GAAGTTTTGCATAAAATGCAAATCGGTGCCTGTGCTTGAAGGTTGCTGTAGAGCATCTGACCCCTTATTACCACC CCGTGGATCAGATGGTTTATAAAAGTAATAACCATAAAGCAAAAAAATAATTTGAAAGCCCGTCTATTCCTATGCT TTTTAGTAGGAATTACTCCTATTCCCCCTGAAGTCAGGACCAGTGCCTGTGATCTCCATTACTTTATTTTCCTGG AGGTATTAGCCAACACAGTTAGATCAGAGAAAGCAATTGAAGCCAGGCATGAAGGCTGGCGCCCGTAATCCCAGC TACTAAGGCTGGAGGATCACTTCAGCCCAGGAGTTTAAGGCTGCAGTGAGCTATGATGATGCCACTGTACTGCAG CCAGAAGGGTAAACTAAACTAAAGCTACAATTAATATGGGAATTTGGAAGAAGTGGTAGGATTTAAAATACAGAA ACAGTTTATGTATAGGATAGCTATAAGTAAATACTGAAACACATTATGCCTCTGTAATTGGGGTTGACACATGAA CAGAATAGCAGACACAATGCATATGAAAGTTACAGAATATGGTAAAAGTGGGGTAAAGATGGGTTTTTAATGATA CTAAGATAACTGAAAATAGGCATATAGATATATTCCAAGCCGCCTGACGATCTAATTGTAAAAAGTAAAGCATAC TCAATTTTAACTACATAAAAATGTTTATAGGACAAGAAAAACCCCACCATAACCCAAGGCAAACAATGTATTGAC AGGATTCCAATAATTAAGAATACTTCATACAAAAAGAAATGTAAATGACCTTTAACATGTAAAGATGCTCACCTT GTTCAGAAGAGAATAAACCAGTGTTTTTACCTTTC

972/2682 FIGURE 898

MASEELQKDLEEVKVLLEKATRKRVRDALTAEKSKIETEIKNKMQQKSQKKAELLDNEKPAAVVAPITTGYTVKI SNYGWDQSDKFVKIYITLTGVHQVPTENVQVHFTERSFDLLVKNLNGKSYSMIVNNLLKPISVEGSSKKVKTDTV LILCRKKVENTRWDYLTQVEKECKEKEKPSYDTETDPSEGLMNVLKKIYEDGDDDMKRTINKAWVESREKQAKGD TEF

973/2682 FIGURE 899

 ${\tt TCCAATCGACAAGAAGCTGGAAAAGA} {\tt ATG} {\tt ATG} {\tt ATGTTGTCCTTAAACAACCTACAGAATATCATCTATAACCCGGTAA}$ TCCCGTTTGTTGGCACCATTCCTGATCAGCTGGATCCTGGAACTTTGATTGTGATACGTGGGCATGTTCCTAGTG ACGCAGACAGATTCCAGGTGGATCTGCAGAATGGCAGCAGCATGAAACCTCGAGCCGATGTGGCCTTTCATTTCA ATCCTCGTTTCAAAAGGGCCGGCTGCATTGTTTGCAATACTTTGATAAATGAAAAATGGGGACGGGAAGAGATCA CCTATGACACGCCTTTCAAAAGAGAAAAGTCTTTTGAGATCGTGATTATGGTGCTGAAGGACAAATTCCAGGTGG CTGTAAATGGAAAACATACTCTGCTCTATGGCCACAGGATCGGCCCAGAGAAAATAGACACTCTGGGCATTTATG GCAAAGTGAATATTCACTCAATTGGTTTTAGCTTCAGCTCGGACTTACAAAGTACCCAAGCATCTAGTCTGGAAC TGACAGAGATAAGTAGAGAAAATGTTCCAAAGTCTGGCACGCCCCAGCTTCCTAGTAATAGAGGAGGAGACATTT CTAAAATCGCACCCAGAACTGTCTACACCAAGAGCAAAGATTCGACTGTCAATCACACTTTGACTTGCACCAAAA TACCACCTATGAACTATGTGTCAAAGAGGCTGCCATTCGCTGCAAGGTTGAACACCCCCATGGGCCCTGGACGAA CTGTCGTCGTTAAAGGAGAAGTGAATGCCAAAAGCTTTAATGTTGACCTACTAGCAGGAAAATCAAAGG ATATTGCTCTACACTTGAACCCACGCCTGAATATTAAAGCATTTGTAAGAAATTCTTTTCTTCAGGAGTCCTGGG GAGAAGAAGAGAAATATTACCTCTCCCATTTAGTCCTGGGATGTACTTTGAGATGATAATTTATTGTGATG TTAGAGAATTCAAGGTTGCAGTAAATGGCGTACACAGCCTGGAGTACAAACACAGATTTAAAGAGCTCAGCAGTA ${\tt TTGACACGCTGGAAATTAATGGAGACATCCACTTACTGGAAGTAAGGAGCTGG} \underline{{\tt TAGC}} {\tt CCTACCTACACAGCTGCTA}$ CAAAAACCAAAATACAGAATGGCTTCTGTGATACTGGCCTTGC

974/2682 FIGURE 900

MMLSLNNLQNIIYNPVIPFVGTIPDQLDPGTLIVIRGHVPSDADRFQVDLQNGSSMKPRADVAFHFNPRFKRAGC IVCNTLINEKWGREEITYDTPFKREKSFEIVIMVLKDKFQVAVNGKHTLLYGHRIGPEKIDTLGIYGKVNIHSIG FSFSSDLQSTQASSLELTEISRENVPKSGTPQLPSNRGGDISKIAPRTVYTKSKDSTVNHTLTCTKIPPMNYVSK RLPFAARLNTPMGPGRTVVVKGEVNANAKSFNVDLLAGKSKDIALHLNPRLNIKAFVRNSFLQESWGEEERNITS LPFSPGMYFEMIIYCDVREFKVAVNGVHSLEYKHRFKELSSIDTLEINGDIHLLEVRSW

975/2682 FIGURE 901

GTCGCGCCATTTTGCCGGGGTTTGAATGTGAGGCGGAGCGGCGGCAGGAGCGGATAGTGCCAGCTACGGTCCGCG GCTGGGGTTCCCTCCGTTTCTGTATCCCCACGAGATCCTATAGCAATGGAACTCAGCGATGCAAATCTGCAA ACACTAACAGAATATTTAAAGAAAACACTTGATCCTGATCCTGCCATCCGACGTCCAGCTGAGAAATTTCTTGAA TCTGTTGAAGGAAATCAGAATTATCCACTGTTGCTTTTGACATTACTGGAGAAGTCCCAGGATAATGTTATCAAA TGTGAAGCCGATCGAGTGGCCATTAAAGCCAACATAGTGCACTTGATGCTTAGCAGCCCAGAGCAAATTCAGAAG CAGTTAAGTGATGCAATTAGCATTATTGGCAGAGAAGATTTTCCACAGAAATGGCCTGACTTGCTGACAGAAATG TACCGTCATGAATTTAAGTCAAACGAGTTATGGACTGAAATTAAGCTTGTTCTGGATGCCTTTGCTTTGCCTTTG ACTAATCTTTTTAAGGCCACTATTGAACTCTGCAGTACCCATGCAAATGATGCCTCTGCCCTGAGGATTCTGTTT TCTTCCCTGATCCTGATCTCAAAATTGTTCTATAGTTTAAACTTTCAGGATCTCCCTGAATTTTGGGAAGGTAAT ATGGAAACTTGGATGAATAATTTCCATACTCTCTTAACATTGGATAATAAGCTTTTACAAACTGATGAAGAG GAAGCCGGCTTATTGGAGCTCTTAAAATCCCAGATTTGTGATAATGCCGCACTCTATGCACAAAAGTACGATGAA GAATTCCAGCGATACCTGCCTCGTTTTGTTACAGCCATCTGGAATTTACTAGTTACAACGGGTCAAGAGGTTAAA TATGATTTGTTGGTAAGTAATGCAATTCAATTTCTGGCTTCAGTTTGTGAGAGACCTCATTATAAGAATCTATTT GAGGACCAGAACACGCTGACAAGTATCTGTGAAAAGGTTATTGTGCCTAACATGGAATTTAGAGCTGCTGATGAA GAAGCATTTGAAGATAATTCTGAGGAGTACATAAGGAGAGATTTGGAAGGATCTGATATTGATACTAGACGCAGG GCTGCTTGTGATCTGGTACGAGGATTATGCAAGTTTTTTGAGGGACCTGTGACAGGAATCTTCTCTGGTTATGTT AATTCCATGCTGCAGGAATACGCAAAAAATCCATCTGTCAACTGGAAACACAAAGATGCAGCCATCTACCTAGTG ACATCTTTGGCATCAAAAGCCCAAACACAGAAGCATGGAATTACACAAGCAAATGAACTTGTAAACCTAACTGAG ATCAAATATATTATGATTTTTAGAAATCAAGTGCCAAAAGAACATCTTTTAGTCTCGATTCCTCTTGATTAAT CATCTTCAAGCTGGAAGTATTGTTGTTCATACTTACGCAGCTCATGCTCTTGAACGGCTCTTTACTATGCGAGGG CCTAACAATGCCACTCTCTTTACAGCTGCAGAAATCGCACCGTTTGTTGAGATTCTGCTAACAAACCTTTTCAAA GCTCTCACACTTCCTGGCTCTTCAGAAAATGAATATATTATGAAAGCTATCATGAGAAGTTTTTCTCTCCTACAA GAAGCCATAATCCCCTACATCCCTACTCTCATCACTCAGCTTACACAGAAGCTATTAGCTGTTAGTAAGAACCCA AGCAAACCTCACTTTAATCACTACATGTTTGAAGCAATATGTTTATCCATAAGAATAACTTGCAAAGCTAACCCT GCTGCTGTTGTAAATTTTGAGGAGGCTTTGTTTTTGGTGTTTACTGAAATCTTACAAAATGATGTGCAAGAATTT ATTCCATACGTCTTTCAAGTGATGTCTTTGCTTCTGGAAACACACAAAAATGACATCCCGTCTTCCTATATGGCC TTATTTCCTCATCTCCTTCAGCCAGTGCTTTGGGAAAGAACAGGAAATATTCCTGCTCTAGTGAGGCTTCTTCAA GCATTCTTAGAACGCGGTTCAAACACAATAGCAAGTGCTGCAGCTGACAAAATTCCTGGGTTACTAGGTGTCTTT CAGAAGCTGATTGCATCCAAAGCAAATGACCACCAAGGTTTTTATCTTCTAAACAGTATAATAGAGCACATGCCT CCTGAATCAGTTGACCAATATAGGAAACAAATCTTCATTCTGCTATTCCAGAGACTTCAGAATTCCAAAACAACC AAGTTTATCAAGAGTTTTTTAGTCTTTATTAATTTGTATTGCATAAAATATGGGGCACTAGCACTACAAGAAATA TTTGATGGTATACAACCAAAAATGTTTGGAATGGTTTTGGAAAAAATTATTATTCCTGAAATTCAGAAGGTATCT GGAAATGTAGAGAAAAAGATCTGTGCGGTTGGCATAACCAACTTACTAACAGAATGTCCCCCAATGATGGACACT GAGTATACCAAACTGTGGACTCCATTATTACAGTCTTTGATTGGTCTTTTTGAGTTACCCGAAGATGATACCATT CCTGATGAGGAACATTTTATTGACATAGAAGATACACCAGGATATCAGACTGCCTTCTCACAGTTGGCATTTGCT GGGAAAAAAGAGCATGATCCTGTAGGTCAAATGGTGAATAACCCCAAAATTCACCTGGCACAGTCACTTCACATG TTGTCTACCGCCTGTCCAGGAAGGGTTCCATCAATGGTGAGCACCAGCCTGAATGCAGAAGCGCTCCAGTATCTC CAAGGGTACCTTCAGGCAGCCAGTGTGACACTGCTT<u>TAA</u>ACTGCATTTTTCTAATGGGCTAAACCCAGATGGTTT CCTAGGAAATCACAGGCTTCTGAGCACAGCTGCATTAAAACAAAGGAAGTTTTCCTTTTGAACTTGTCACGA

976/2682 FIGURE 902

MELSDANLQTLTEYLKKTLDPDPAIRRPAEKFLESVEGNQNYPLLLTLLEKSQDNVIKVCASVTFKNYIKRNWR
IVEDEPNKICEADRVAIKANIVHLMLSSPEQIQKQLSDAISIIGREDFPQKWPDLLTEMVNRFQSGDFHVINGVL
RTAHSLFKRYRHEFKSNELWTEIKLVLDAFALPLTNLFKATIELCSTHANDASALRILFSSLILISKLFYSLNFQ
DLPEFWEGNMETWMNNFHTLLTLDNKLLQTDDEEEAGLLELLKSQICDNAALYAQKYDEEFQRYLPRFVTAIWNL
LVTTGQEVKYDLLVSNAIQFLASVCERPHYKNLFEDQNTLTSICEKVIVPNMEFRAADEEAFEDNSEEYIRRDLE
GSDIDTRRRAACDLVRGLCKFFEGPVTGIFSGYVNSMLQEYAKNPSVNWKHKDAAIYLVTSLASKAQTQKHGITQ
ANELVNLTEFFVNHILPDLKSANVNEFPVLKADGIKYIMIFRNQVPKEHLLVSIPLLINHLQAGSIVVHTYAAHA
LERLFTMRGPNNATLFTAAEIAPFVEILLTNLFKALTLPGSSENEYIMKAIMRSFSLLQEAIIPYIPTLITQLTQ
KLLAVSKNPSKPHFNHYMFEAICLSIRITCKANPAAVVNFEEALFLVFTEILQNDVQEFIPYVFQVMSLLLETHK
NDIPSSYMALFPHLLQPVLWERTGNIPALVRLLQAFLERGSNTIASAAADKIPGLLGVFQKLIASKANDHQGFYL
LNSIIEHMPPESVDQYRKQIFILLFQRLQNSKTTKFIKSFLVFINLYCIKYGALALQEIFDGIQPKMFGMVLEKI
IIPEIQKVSGNVEKKICAVGITNLLTECPPMMDTEYTKLWTPLLQSLIGLFELPEDDTIPDEEHFIDIEDTPGYQ
TAFSQLAFAGKKEHDPVGQMVNNPKIHLAQSLHMLSTACPGRVPSMVSTSLNAEALQYLQGYLQAASVTLL

977/2682 FIGURE 903

GGCACGAGGAGACAAAGCAGCGCCCGTCTGCTTCGGGCCTCTGGAATTTAGCGCTCGCCCAGCTAGCCGCAGAAA $\underline{\mathbf{TG}} \texttt{ACTGCTGTCCATGCAGGCAACATAAACTTCAAGTGGGATCCTAAAAGTCTAGAGATCAGGACTCTGGCAGTTG}$ ${\tt AGAGACTGTTGGAGCCTCTTGTTACACAGGTTACAACCCTTGTAAACACCCAATAGTAAAGGGCCCTCTAATAAGA}$ AGAGAGGTCGTTCTAAGAAGGCCCATGTTTTGGCTGCATCTGTTGAACAAGCAACTGAGAATTTCTTGGAGAAGG ${\tt GGGATAAAATTGCGAAGGAGCCAGTTTCTCAAGGAGGAGCTTGTGGCTGCTAGAAGATGTTCGAAAACAAG}$ GTGATTTGATGAAGGCTGCTGCAGGAGATTCGCAGATGATCCCTGCTCTTCTGTGAAGCGAGGCAACATGGTTC GGGCAGCTCGAGCTTTGCTCTCTGCTGTTACCCGGTTGCTGATTTTGGCTGACATGGCAGATGTCTACAAATTAC TTGTTCAGCTGAAAGTTGTGGAAGATGGTATCTTGAAGTTGAGGAATGCTGGCAATGAACAAGACTTAGGAATCC AGTATAAAGCCCTAAAACCTGAAGTGGATAAGCTGAACATTATGGCAGCCAAAAGACAACAGGAATTGAAAGATG TTGGCCATCGTGATCAGATGGCTGCAGCTAGAGGAATCCTGCAGAAGAACGTTCCGATCCTCTATACTGCATCCC AGGCATGCCTACAGCACCCTGATGTCGCAGCCTATAAGGCCAACAGGGACCTGATATACAAGCAGCTGCAGCAGG CGGTCACAGGCATTTCCAATGCAGCCCAGGCCACTGCCTCAGACGATGCCTCACAGCACCAGGGTGGAGGAGGAG GAGAACTGGCATATGCACTCAATAACTTTGACAAACAAATCATTGTGGACCCCTTGAGCTTCAGCGAGGAGCGCT TTAGGCCTTCCCTGGAGGAGCGTCTGGAAAGCATCATTAGTGGGGCTGCCTTGATGGCCGACTCGTCCTGCACGC GTGATGACCGTCGTGAGCGAATTGTGGCAGAGTGTAATGCTGTCCGCCAGGCCCTGCAGGACCTGCTTTCGGAGT ACATGGGCAATGCTGGACGTAAAGAAGAAGTGATGCACTCAATTCTGCAATAGATAAAATGACCAAGAAGACCA GGGACTTGCGTAGACAGCTCCGCAAAGCTGTCATGGACCACGTTTCAGATTCTTTCCTGGAAACCAATGTTCCAC ${\tt ATGCCAACAAATTGATTGAGGTTGCCAACTTGGCCTGTTCCATCTCAAATAATGAAGAAGGTGTAAAGCTTGTTC}$ GAATGTCTGCAAGCCAGTTAGAAGCCCTCTGTCCTCAGGTTATTAATGCTGCACTGGCTTTAGCAGCAAAACCAC AGAGTAAACTGGCCCAAGAGAACATGGATCTTTTTAAAGAACAATGGGAAAAACAAGTCCGTGTTCTCACAGATG CTGTCGATGACATTACTTCCATTGATGACTTCTTGGCTGTCTCAGAGAATCACATTTTGGAAGATGTGAACAAAT GTGTCATTGCTCTCCAAGAGAAGGATGTGGATGGCCTGGACCGCACAGCTGGTGCAATTCGAGGCCGGGCAGCCC GGGTCATTCACGTAGTCACCTCAGAGATGGACAACTATGAGCCAGGAGTCTACACAGAGAAGGTTCTGGAAGCCA CTAAGCTGCTCTCCAACACAGTCATGCCACGTTTTACTGAGCAAGTAGAAGCAGCCGTGGAAGCCCTCAGCTCGG ACCCTGCCCAGCCCATGGATGAGAATGAGTTTATCGATGCTTCCCGCCTGGTATATGATGGCATCCGGGACATCA GGAAAGCAGTGCTGATGATAAGGACCCCTGAGGAGTTGGATGACTCTGACTTTGAGACAGAAGATTTTGATGTCA GAAGCAGGACGAGCGTCCAGACAGAAGACGATCAGCTGATAGCTGGCCAGAGTGCCCGGGCGATCATGGCTCAGC TTCCCCAGGAGCAAAAAGCGAAGATTGCGGAACAGGTGGCCAGCTTCCAGGAAGAAAAGAGCAAGCTGGATGCTG AAGTGTCCAAATGGGACGACAGTGGCAATGACATCATTGTGCTGGCCAAGCAGATGTGCATGATTATGATGGAGA TGACAGACTTTACCCGAGGTAAAGGACCACTCAAAAATACATCGGATGTCATCAGTGCTGCCAAGAAAATTGCTG AGGCAGGATCCAGGATGGACAAGCTTGGCCGCACCATTGCAGACCATTGCCCCGACTCGGCTTGCAAGCAGGACC TGCTGGCCTACCTGCAACGCATCGCCCTCTACTGCCACCAGCTGAACATCTGCAGCAAGGTCAAGGCCGAGGTGC AGAATCTCGGCGGGGAGCTTGTTGTCTCTGGGGTGGACAGCGCCATGTCCCTGATCCAGGCAGCCAAGAACTTGA TGAATGCTGTGGTGCAGACAGTGAAGGCATCCTACGTCGCCTCTACCAAATACCAAAAGTCACAGGGTATGGCTT CCCTCAACCTTCCTGCTGTCATGGAAGATGAAGGCACCAGAGAAAAAGCCATTGGTGAAGAGAGAAAAACAGG ATGAGACACAGACCAAGATTAAACGGGCATCTCAGAAGAAGCACGTGAACCCGGTGCAGGCCCTCAGCGAGTTCA $\mathtt{AAGCTATGGACAGCATC}$ $\mathtt{TAAGCTCAGGCCGGCCGGCCGCCCCCCCGGGGGCTCCTGAATATCAGTCACTGT}$ TCGTCACTCAAATGAATTTGCTAAATACAACACTGATACTAGATTCCACAGGGAAATGGGCAGACTGAACCAGTC CAGGTGGTGAATTTTCCAAGAACATAGTTTAAGTTGATTAAAAATGCTTTTAGAATGCAGGAGCCTACTTCTAGC TGTATTTTTTGTATGCTTAAATAAAAATAAAAATTCATAACCAAAGAGAATCCCACATTAGCTTGTTAGTAATGC TCTGACCAAGCCGAGATGCCCATTCTCTTAGTGATGGCGGCGTTAGGGTTTGAGAGAAGGGAATTTGGCTCAACT TCAGTTGAGAGGGTGCAGTCCAGACAGCTTGACTGCTTTTAAATGACCAAAGATGACCTGTGGTAAGCAACCTGG CATAATGTATCATGAAGAAAACTGATTCTCTATGACATGAAATGAAAATTTTAATGCATTGTTATAATTACTAAT

978/2682 FIGURE 904

MTAVHAGNINFKWDPKSLEIRTLAVERLLEPLVTQVTTLVNTNSKGPSNKKRGRSKKAHVLAASVEQATENFLEK
GDKIAKESQFLKEELVAAVEDVRKQGDLMKAAAGEFADDPCSSVKRGNMVRAARALLSAVTRLLILADMADVYKL
LVQLKVVEDGILKLRNAGNEQDLGIQYKALKPEVDKLNIMAAKRQQELKDVGHRDQMAAARGILQKNVPILYTAS
QACLQHPDVAAYKANRDLIYKQLQQAVTGISNAAQATASDDASQHQGGGGGELAYALNNFDKQIIVDPLSFSEER
FRPSLEERLESIISGAALMADSSCTRDDRRERIVAECNAVRQALQDLLSEYMGNAGRKERSDALNSAIDKMTKKT
RDLRRQLRKAVMDHVSDSFLETNVPLLVLIEAAKNGNEKEVKEYAQVFREHANKLIEVANLACSISNNEEGVKLV
RMSASQLEALCPQVINAALALAAKPQSKLAQENMDLFKEQWEKQVRVLTDAVDDITSIDDFLAVSENHILEDVNK
CVIALQEKDVDGLDRTAGAIRGRAARVIHVVTSEMDNYEPGVYTEKVLEATKLLSNTVMPRFTEQVEAAVEALSS
DPAQPMDENEFIDASRLVYDGIRDIRKAVLMIRTPEELDDSDFETEDFDVRSRTSVQTEDDQLIAGQSARAIMAQ
LPQEQKAKIAEQVASFQEEKSKLDAEVSKWDDSGNDIIVLAKQMCMIMMEMTDFTRGKGPLKNTSDVISAAKKIA
EAGSRMDKLGRTIADHCPDSACKQDLLAYLQRIALYCHQLNICSKVKAEVQNLGGELVVSGVDSAMSLIQAAKNL
MNAVVQTVKASYVASTKYQKSQGMASLNLPAVSWKMKAPEKKPLVKREKQDETQTKIKRASQKKHVNPVQALSEF
KAMDSI

979/2682 FIGURE 905A

GCGAGAGGGGTCGGGATCTGCGCTGCAGCCACCGCCGCGGTTGATACTACTTTGACCTTCCGAGTGCAGTGAGGC ATACATCACAATTTGGAATTATGCATTGGTTTATCAATTTACTTGTTTATTGTCACCCTGCTGCCCAGATATGAC TTCATGAGGACAGTGATGTGTTCTGAAATTGTGAACCATGAGTCTAGTACTTAATGATCTGCTTATCTGCTGC CGTCAACTAGAACATGATAGAGCTACAGAACGAAAGAAGAAGTTGAGAAATTTAAGCGCCTGATTCGAGATCCT GAAACAATTAAACATCTAGATCGGCATTCAGATTCCAAACAAGGAAAATATTTGAATTGGGATGCTGTTTTTAGA TTTTTACAGAAATATATTCAGAAAGAAACAGAATGTCTGAGAATAGCAAAACCAAATGTATCAGCCTCAACACAA GCCTCCAGGCAGAAAAGATGCAGGAAATCAGTAGTTTGGTCAAATACTTCATCAAATGTGCAAACAGAAGAGCA CCTAGGCTAAAATGTCAAGAACTCTTAAATTATATCATGGATACAGTGAAAGATTCATCTAATGGTGCTATTTAC CAGTGGTTAGAATTGTTCTCTGTGTACTTCAGGCTCTATCTGAAACCTTCACAAGATGTTCATAGAGTTTTAGTG GCTAGAATAATTCATGCTGTTACCAAAGGATGCTGTTCTCAGACTGACGGATTAAATTCCAAATTTTTGGACTTT TTTTCCAAGGCTATTCAGTGTGCGAGACAAGAAAAGAGCTCTTCAGGTCTAAATCATATCTTAGCAGCTCTTACT ATCTTCCTCAAGACTTTGGCTGTCAACTTTCGAATTCGAGTGTGTGAATTAGGAGATGAAATTCTTCCCACTTTG CTTTATATTTGGACTCAACATAGGCTTAATGATTCTTTAAAAGAAGTCATTATTGAATTATTTCAACTGCAAATT TATATCCATCATCCGAAAGGAGCCAAAACCCAAGAAAAAGGTGCTTATGAATCAACAAAATGGAGAAGTATTTTA TACAACTTATATGATCTGCTAGTGAATGAGATAAGTCATATAGGAAGTAGAGGAAAGTATTCTTCAGGATTTCGT AATATTGCCGTCAAAGAAATTTGATTGAATTGATGGCAGATATCTGTCACCAGGTTTTTAATGAAGATACCAGA TCCTTGGAGATTTCTCAATCTTACACTACTACAAAAGAGAATCTAGTGATTACAGTGTCCCTTGCAAAAGGAAG AAAATAGAACTAGGCTGGGAAGTAATAAAAGATCACCTTCAGAAGTCACAGAATGATTTTGATCTTGTGCCTTGG CTACAGATTGCAACCCAATTAATATCAAAGTATCCTGCAAGTTTACCTAACTGTGAGCTGTCTCCATTACTGATG ATACTATCTCAGCTTCTACCCCAACAGCGACATGGGGAACGTACACCATATGTGTTACGATGCCTTACGGAAGTT GCATTGTGTCAAGACAAGAGGTCAAACCTAGAAAGCTCACAAAAGTCAGATTTATTAAAACTCTGGAATAAAATT TGGTGTATTACCTTTCGTGGTATAAGTTCTGAGCAAATACAAGCTGAAAACTTTGGCTTACTTGGAGCCATAATT CAGGGTAGTTTAGTTGAGGTTGACAGAGAATTCTGGAAGTTATTTACTGGGTCAGCCTGCAGACCTTCATGTCCT GCAGTATGCTGTTTGACTTTGGCACTGACCACCAGTATAGTTCCAGGAGCGGTAAAAATGGGAATAGAGCAAAAT ATGTGTGAAGTAAATAGAAGCTTTTCTTTAAAGGAATCAATAATGAAATGGCTCTTATTCTATCAGTTAGAGGGT GACTTAGAAAATAGCACAGAAGTGCCTCCAATTCTTCACAGTAATTTTCCTCATCTTGTACTGGAGAAAATTCTT GTGAGTCTCACTATGAAAAACTGTAAAGCTGCAATGAATTTTTTCCAAAGCGTGCCAGAATGTGAACACCACCAA AAAGATAAAGAAGAACTTTCATTCTCAGAAGTAGAAGAACTATTTCTTCAGACAACTTTTGACAAGATGGACTTT TTAACCATTGTGAGAGAATGTGGTATAGAAAAGCACCAGTCCAGTATTGGCTTCTCTGTCCACCAGAATCTCAAG GAATCACTGGATCGCTGTCTTCTGGGATTATCAGAACAGCTTCTGAATAATTACTCATCTGAGATTACAAATTCA GAAACTCTTGTCCGGTGTTCACGTCTTTTGGTGGGTGTCCTTGGCTGCTACTGTTACATGGGTGTAATAGCTGAA GAGGAAGCATATAAGTCAGAATTATTCCAGAAAGCCAACTCTCTAATGCAATGTGCAGGAGAAAGTATCACTCTG TTTAAAAATAAGACAAATGAGGAATTCAGAATTGGTTCCTTGAGAAATATGATGCAGCTATGTACACGTTGCTTG AGCAACTGTACCAAGAAGAGTCCAAATAAGATTGCATCTGGCTTTTTCCTGCGATTGTTAACATCAAAGCTAATG AATGACATTGCAGATATTTGTAAAAGTTTAGCATCCTTCATCAAAAAGCCATTTGACCGTGGAGAAGTAGAATCA ATGGAAGATGATACTAATGGAAATCTAATGGAGGTGGAGGATCAGTCATCCATGAATCTATTTAACGATTACCCT GATAGTAGTGTTAGTGATGCAAACGAACCTGGAGAGAGCCAAAGTACCATAGGTGCCATTAATCCTTTAGCTGAA GAATATCTGTCAAAGCAAGATCTACTTTTCTTAGACATGCTCAAGTTCTTGTGTTTTGTGTAACTACTGCTCAG ACCANTACTGTGTCCTTTAGGGCAGCTGATATTCGGAGGAAATTGTTAATGTTAATTGATTCTAGCACGCTAGAA CCTACCAAATCCCTCCACCTGCATATGTATCTAATGCTŢTTAAAGGAGCTTCCTGGAGAAGAGTACCCCTTGCCA ATGGAAGATGTTCTTGAACTTCTGAAACCACTATCCAATGTGTGTTCTTTGTATCGTCGTGACCAAGATGTTTGT AAAACTATTTTAAACCATGTCCTTCATGTAGTGAAAAACCTAGGTCAAAGCAATATGGACTCTGAGAACACAAGG GTAAGAATGGCCCTAGTAAATTGCCTTAAAACTTTGCTTGAGGCTGATCCTTATTCAAAATGGGCCATTCTTAAT GTAATGGGAAAAGACTTTCCTGTAAATGAAGTATTTACACAATTTCTTGCTGACAATCATCACCAAGTTCGCATG TTGGCTGCAGAGTCAATCAATAGATTGTTCCAGGACACGAAGGGAGATTCTTCCAGGTTACTGAAAGCACTTCCT

980/2682 FIGURE 905B

GCTGAGAACCCTGAAACTTTGGATGAAATTTATAATAGAAAATCTGTTTTACTGACGTTGATAGCTGTGGTTTTA TCCTGTAGCCCTATCTGCGAAAAACAGGCTTTGTTTGCCCTGTGTAAATCTGTGAAAGAGAATGGATTAGAACCT CACCTTGTGAAAAAGGTTTTAGAGAAAGTTTCTGAAACTTTTGGATATAGACGTTTAGAAGACTTTATGGCATCT CATTTAGATTATCTGGTTTTGGAATGGCTAAATCTTCAAGATACTGAATACAACTTATCTTCTTTTTCCTTTTATT TTATTAAACTACACAAATATTGAGGATTTCTATAGATCTTGTTATAAGGTTTTGATTCCACATCTGGTGATTAGA AGTCATTTTGATGAGGTGAAGTCCATTGCTAATCAGATTCAAGAGGACTGGAAAAGTCTTCTAACAGACTGCTTT CCAAAGATTCTTGTAAATATTCTTCCTTATTTTGCCTATGAGGGTACCAGAGACAGTGGGATGGCACAGCAAAGA GAGACTGCTACCAAGGTCTATGATATGCTTAAAAGTGAAAACTTATTGGGAAAACAGATTGATCACTTATTCATT AGTAATTTACCAGAGATTGTGGTGGAGTTATTGATGACGTTACATGAGCCAGCAAATTCTAGTGCCAGTCAGAGC ACTGACCTCTGTGACTTTTCAGGGGATTTGGATCCTGCTCCTAATCCACCTCATTTTCCATCGCATGTGATTAAA GCAACATTTGCCTATATCAGCAATTGTCATAAAACCAAGTTAAAAAGCATTTTAGAAATTCTTTCCAAAAGCCCT ATTCTTAAAATATATCACCTGTTTGTTAGTTTATTACTGAAAGATATAAAAAGTGGCTTAGGAGGAGCTTGGGCC TTTGTTCTTCGAGACGTTATTTATACTTTGATTCACTATATCAACCAAAGGCCTTCTTGTATCATGGATGTGTCA TTACGTAGCTTCTCCCTTTGTTGTGACTTATTAAGTCAGGTTTGCCAGACAGCCGTGACTTACTGTAAGGATGCT CTAGAAAACCATCTTCATGTTATTGTTGGTACACTTATACCCCTTGTGTATGAGCAGGTGGAGGTTCAGAAACAG GTATTGGACTTGTTGAAATACTTAGTGATAGATAACAAGGATAATGAAAACCTCTATATCACGATTAAGCTTTTA GATCCTTTTCCTGACCATGTTGTTTTTAAGGATTTGCGTATTACTCAGCAAAAAATCAAATACAGTAGAGGACCC TTTTCACTCTTGGAGGAAATTAACCATTTTCTCTCAGTAAGTGTTTATGATGCACTTCCATTGACAAGACTTGAA GGACTAAAGGATCTTCGAAGACAACTGGAACTACATAAAGATCAGATGGTGGACATTATGAGAGCTTCTCAGGAT AATCCGCAAGATGGGATTATGGTGAAACTAGTTGTCAATTTGTTGCAGTTATCCAAGATGGCAATAAACCACACT GGTGAAAAAGAAGTTCTAGAGGCTGTTGGAAGCTGCTTGGGAGAAGTGGGTCCTATAGATTTCTCTACCATAGCT ATACAACATAGTAAAGATGCATCTTATACCAAGGCCCTTAAGTTATTTGAAGATAAAGAACTTCAGTGGACCTTC ATAATGCTGACCTACCTGAATAACACACTGGTAGAAGATTGTGTCAAAGTTCGATCAGCAGCTGTTACCTGTTTG AAAAACATTTTAGCCACAAAGACTGGACATAGTTTCTGGGAGATTTATAAGATGACAACAGATCCAATGCTGGCC TATCTACAGCCTTTTAGAACATCAAGAAAAAAGTTTTTAGAAGTACCCAGATTTGACAAAGAAAACCCTTTTGAA GGCCTGGATGATATAAATCTGTGGATTCCTCTAAGTGAAAATCATGACATTTGGATAAAGACACTGACTTGTGCT TTTTTGGACAGTGGAGGCACAAAATGTGAAATTCTTCAATTATTAAAGCCAATGTGTGAAAGTGAAAACTGACTTT TGTCAGACTGTACTTCCATACTTGATTCATGATATTTTACTCCAAGATACAAATGAATCATGGAGAAATCTGCTT TCTACACATGTTCAGGGATTTTTCACCAGCTGTCTTCGACACTTCTCGCAAACGAGCCGATCCACAACCCCTGCA TATCTAGAAGTTGCCAAGGTAGCTCAGTCTTGTGCTGCTCACTTTACAGCTTTACTCTATGCAGAAATCTATGCA AGCTTGAGTGAAAAAAGTAAAGAAAACTGGAATAAGTTTACAGGATCTTCTCTTAGAAATCTACAGAAGTATA GGGGAGCCAGATAGTTTGTATGGCTGTGGTGGAGGGAAGATGTTACAACCCATTACTAGACTACGAACATATGAA CACGAAGCAATGTGGGGCAAAGCCCTAGTAACATATGACCTCGAAACAGCAATCCCCTCATCAACACGCCAGGCA GGAATCATTCAGGCCTTGCAGAATTTGGGACTCTGCCATATTCTTTCCGTCTATTTAAAAGGATTGGATTATGAA AATAAAGACTGGTGTCCTGAACTAGAAGAACTTCATTACCAAGCAGCATGGAGGAATATGCAGTGGGACCATTGC ACTTCCGTCAGCAAAGAAGTAGAAGGAACCAGTTACCATGAATCATTGTACAATGCTCTACAATCTCTAAGAGAC AGAGAATTCTCTACATTTTATGAAAGTCTCAAATATGCCAGAGTAAAAGAAGTGGAAGAGATGTGTAAGCGCAGC CTTGAGTCTGTGTATTCGCTCTATCCCACACTTAGCAGGTTGCAGGCCATTGGAGAGCTGGAAAGCATTGGGGAG CTTTTCTCAAGATCAGTCACACATAGACAACTCTCTGAAGTATATATTAAGTGGCAGAAACACTCCCAGCTTCTC AAGGACAGTGATTTTAGTTTTCAGGAGCCTATCATGGCTCTACGCACAGTCATTTTGGAGATCCTGATGGAAAAG GAAATGGACAACTCACAAAGAGAATGTATTAAGGACATTCTCACCAAACACCTTGTAGAACTCTCTATACTGGCC AGAACTTTCAAGAACACTCAGCTCCCTGAAAGGGCAATATTTCAAATTAAACAGTACAATTCAGTTAGCTGTGGA GTCTCTGAGTGGCAGCTGGAAGAAGCACAAGTATTCTGGGCAAAAAAGGAGCAGAGTCTTGCCCTGAGTATTCTC

981/2682 FIGURE 905C

CTGAGGGTTTGTGGCAACTGGTTAGCAGAAACGTGCTTAGAAAATCCTGCGGTCATCATGCAGACCTATCTAGAA AAGGCAGTAGAAGTTGCTGGAAATTATGATGGAGAAAGTAGTGATGAGCTAAGAAATGGAAAAATGAAGGCATTT CTCTCATTAGCCCGGTTTTCAGATACTCAATACCAAAGAATTGAAAACTACATGAAATCATCGGAATTTGAAAAC AAGCAAGCTCTCCTGAAAAGAGCCAAAGAGGAAGTAGGTCTCCTTAGGGAACATAAAATTCAGACAAACAGATAC ACAGTAAAGGTTCAGCGAGAGCTGGAGTTGGATGAATTAGCCCTGCGTGCACTGAAAGAGGATCGTAAACGCTTC TTATGTAAAGCAGTTGAAAATTATATCAACTGCTTATTAAGTGGAGAAGAACATGATATGTGGGTATTCCGGCTT ACATATAAATTTTTGCCTCTTATGTACCAATTGGCTGCTAGAATGGGGACCAAGATGATGGGGAGGCCTAGGATTT CATGAAGTCCTCAATAATCTAATCTCTAGAATTTCAATGGATCACCCCCATCACACTTTGTTTATTATACTGGCC TTAGCAAATGCAAACAGAGATGAATTTCTGACTAAACCAGAGGTAGCCAGAAGAAGCAGAATAACTAAAAATGTG CCTAAACAAAGCTCTCAGCTTGATGAGGATCGAACAGAGGCTGCAAATAGAATAATATGTACTATCAGAAGTAGG AGACCTCAGATGGTCAGAAGTGTTGAGGCACTTTGTGATGCTTATATTATATTAGCAAACTTAGATGCCACTCAG TGGAAGACTCAGAGAAAAGGCATAAATATTCCAGCAGACCAGCCAATTACTAAACTTAAGAATTTAGAAGATGTT GTTGTCCCTACTATGGAAATTAAGGTGGACCACACAGGAGAATATGGAAATCTGGTGACTATACAGTCATTTAAA GCAGAATTTCGCTTAGCAGGAGGTGTAAATTTACCAAAAATAATAGATTGTGTAGGTTCCGATGGCAAGGAGAG AGACAGCTTGTTAAGGGCCGTGATGACCTGAGACAAGATGCTGTCATGCAACAGGTCTTCCAGATGTGTAATACA TTACTGCAGAGAAACACGGAAACTAGGAAGAGGAAATTAACTATCTGTACTTATAAGGTGGTTCCCCTCTCTCAG CGAAGTGGTGTTCTTGAATGGTGCACAGGAACTGTCCCCATTGGTGAATTTCTTGTTAACAATGAAGATGGTGCT CATAAAAGATACAGGCCAAATGATTTCAGTGCCTTTCAGTGCCAAAAGAAATGATGGAGGTGCAAAAAAAGTCT TTTGAAGAGAAATATGAAGTCTTCATGGATGTTTGCCAAAATTTTCAACCAGTTTTCCGTTACTTCTGCATGGAA AAATTCTTGGATCCAGCTATTTGGTTTGAGAAGCGATTGGCTTATACGCGCAGTGTAGCTACTTCTTCTATTGTT GGTTACATACTTGGACTTGGTGATAGACATGTACAGAATATCTTGATAAATGAGCAGTCAGCAGAACTTGTACAT GATATTGTGGATGGCATGGGCATTACGGGTGTTGAAGGTGTCTTCAGAAGATGCTGTGAGAAAACCATGGAAGTG ATGAGAAACTCTCAGGAAACTCTGTTAACCATTGTAGAGGTCCTTCTATATGATCCACTCTTTGACTGGACCATG AATCCTTTGAAAGCTTTGTATTTACAGCAGAGGCCGGAAGATGAAACTGAGCTTCACCCTACTCTGAATGCAGAT GACCAAGAATGCAAACGAAATCTCAGTGATATTGACCAGAGTTTCAACAAAGTAGCTGAACGTGTCTTAATGAGA CTACAAGAGAAACTGAAAGGAGTGGAAGAAGGCACTGTGCTCAGTGTTGGTGGACAAGTGAATTTGCTCATACAG CAGGCCATAGACCCCAAAAATCTCAGCCGACTTTTCCCAGGATGGAAAGCTTGGGTGTGATCTTCAGTATATGAA TTACCCTTTCATTCAGCCTTTAGAAATTATATTTTAGCCTTTATTTTTAACCTGCCAACATACTTTAAGTAGGGA TTAATATTTAAGTGAACTATTGTGGGTTTTTTTGAATGTTGGTTTTAATACTTGATTTAATCACCACTCAAAAAT CACGCCTGTAATCCCAGCACTTTGGGAGGCCGAGGTGAGCGGATCACAAGGTCAGGAGTTCGAGACCAGCCTGGC CAAGAGACCAGCCTGGCCAGTATGGTGAAACCCTGTCTCTACTAAAAAATACAAAAATTAGCCGAGCATGGTGGCG GGCACCTGTAGTCCCAGCTACTCGAGAGGCTGAGGCAGGAGAATCTCTTGAACCTGGGAGGTGAAGGTTGCTGTG GGCCAAAATCATGCCATTGCACTCCAGCCTGGGTGACAAGAGCGAAACTCCATCTCAAAAA

982/2682 FIGURE 906

MTLHEPANSSASQSTDLCDFSGDLDPAPNPPHFPSHVIKATFAYISNCHKTKLKSILEILSKSPDSYQKILLAIC EQAAETNNVYKKHRILKIYHLFVSLLLKDIKSGLGGAWAFVLRDVIYTLIHYINQRPSCIMDVSLRSFSLCCDLL SQVCQTAVTYCKDALENHLHVIVGTLIPLVYEQVEVQKQVLDLLKYLVIDNKDNENLYITIKLLDPFPDHVVFKD LRITQQKIKYSRGPFSLLEEINHFLSVSVYDALPLTRLEGLKDLRRQLELHKDQMVDIMRASQDNPQDGIMVKLV VNLLQLSKMAINHTGEKEVLEAVGSCLGEVGPIDFSTIAIQHSKDASYTKALKLFEDKELQWTFIMLTYLNNTLV EDCVKVRSAAVTCLKNILATKTGHSFWEIYKMTTDPMLAYLQPFRTSRKKFLEVPRFDKENPFEGLDDINLWIPL SENHDIWIKTLTCAFLDSGGTKCEILQLLKPMCEVKTDFCQTVLPYLIHDILLQDTNESWRNLLSTHVQGFFTSC ${\tt LRHFSQTSRSTTPANLDSESEHFFRCCLDKKSQRTMLAVVDYMRRQKRPSSGTIFNDAFWLDLNYLEVAKVAQSC}$ AAHFTALLYAEIYADKKSMDDQEKRSLAFEEGSQSTTISSLSEKSKEETGISLQDLLLEIYRSIGEPDSLYGCGG GKMLQPITRLRTYEHEAMWGKALVTYDLETAIPSSTRQAGIIQALQNLGLCHILSVYLKGLDYENKDWCPELEEL ${\tt HYQAAWRNMQWDHCTSVSKEVEGTSYHESLYNALQSLRDREFSTFYESLKYARVKEVEEMCKRSLESVYSLYPTL}$ SRLQAIGELESIGELFSRSVTHRQLSEVYIKWQKHSQLLKDSDFSFQEPIMALRTVILEILMEKEMDNSQRECIK DILTKHLVELSILARTFKNTQLPERAIFQIKQYNSVSCGVSEWQLEEAQVFWAKKEQSLALSILKQMIKKLDASC ${\tt AANNPSLKLTYTECLRVCGNWLAETCLENPAVIMQTYLEKAVEVAGNYDGESSDELRNGKMKAFLSLARFSDTQY}$ QRIENYMKSSEFENKQALLKRAKEEVGLLREHKIQTNRYTVKVQRELELDELALRALKEDRKRFLCKAVENYINC LLSGEEHDMWVFRLCSLWLENSGVSEVNGMMKRDGMKIPTYKFLPLMYQLAARMGTKMMGGLGFHEVLNNLISRI SMDHPHHTLFIILALANANRDEFLTKPEVARRSRITKNVPKQSSQLDEDRTEAANRIICTIRSRRPQMVRSVEAL CDAYIILANLDATQWKTQRKGINIPADQPITKLKNLEDVVVPTMEIKVDHTGEYGNLVTIQSFKAEFRLAGGVNL ${\tt PKIIDCVGSDGKERRQLVKGRDDLRQDAVMQQVFQMCNTLLQRNTETRKRKLTICTYKVVPLSQRSGVLEWCTGT}$ VPIGEFLVNNEDGAHKRYRPNDFSAFQCQKKMMEVQKKSFEEKYEVFMDVCQNFQPVFRYFCMEKFLDPAIWFEK EGVFRRCCEKTMEVMRNSQETLLTIVEVLLYDPLFDWTMNPLKALYLQQRPEDETELHPTLNADDQECKRNLSDI DQSFNKVAERVLMRLQEKLKGVEEGTVLSVGGQVNLLIQQAIDPKNLSRLFPGWKAWV

983/2682 FIGURE 907

GCCTGCGCGGTAGTGGGACCCGACCCTGTCTCCAGTGGGCGTCTTGGGCCCCGGCTCTATTCTGGGCTGCGGGCC
TGGGAAGGGCTCGCCGGGTGCCAAATGAGCTGTCCTAACTCTGCGGGGCTGCAGCTTCCTGCATGATGCTGGGGA
GCTTGGCGCCTGACCCAGGATCTAGAAGGCACTCTGGGCAGGCCGCGCCCCCACGAAGGTACCCAACCCTCT
GGGATAGATGCAGGAAGCGATGGTTAAGACCCATTTTCACCCAACTTCTCGCCGCAGGTCTGGCTTACCACACGC
TCCTCCCCATTCCCAGTGAGCCGCTTTTTGCAGCACCAGGCGAACACTTACACCAGTGCTTTGTAAAGGAATCTT
ATTGTCCACCCCGTGTCTTGGCAAAAGAACAGTGATCACACAGATTCCTACTTGGGCTCTTTCCTTTAATCTTCG
GAGGCTGAGTTTGCCCAACTCAGGTTTAACCACCAAGGACTCTGAGAGCTGGCAGGTCTGAGTAACCCTGGTAAC
AATTCTCTTCACCTTATCAAAACCTGAGCTAAAAACCAATGCATCAGCTGATGATGACAGCAGAGAGTGGCAGGC
TGAGGACCCAAAGTCATTTCCCAGGCTGGCGAGAATAAACTGCCAGGGAGAAGAATGAGAAGACAGGAGACAAA
CTGTTTGGAAAGCTAAATCTTCCCTCTTAATGAATAAAGGTTTTTGCCTTGTCTTAAAGTTTCTGAGCCTCTAACATTA
CTTCCCAAAATCAAACTTCAGGTATCAAAAT

984/2682 FIGURE 908

 ${\tt MMLGSLAPDPGSRRHSGQAALRPRRYPTLWDRCRKRWLRPIFTQLLAAGLAYHTLLPIPSEPLFAAPGEHLHQCF} \\ {\tt VKESYCPPRVLAKEQ}$

985/2682 FIGURE 909

GTTTTGAAAGTTGATGGAGCGAACTGCTTTTCCAAAGACTCTTTTGAAAAACTTTTTAAGTAGGCCATTCTGACT TTAACATTTCTCTTTGTCTTAACATTAGACAAAAAGTAACCTTCCTGAAGAGGACATGTGATTGGAAGTTGTCAA TTGTTGAAGCATTGGTAACTCCAGTCTCTAACGTTTTAGAAAATCATAACAAGCGGTTCTCTACCCTGTAAAGGT GAACTACTGAGTTCTTCATTATGTCTGATGGAGATTATGATTACCTCATCAAGTTTTTAGCTTTGGGAGACTCTG GTGTAGGGAAGACCAGTGTACTTTACCAATATACAGATGGTAAATTTAACTCCAAATTTATCACAACAGTGGGCA TTGATTTCAGGGAAAAAAGAGTGGTGTACAGAGCCAGTGGGCCGGATGGAGCCACTGGCAGAGGCCAGAGAATCC ACCTGCAGTTATGGGACACAGCAGGGCAGGAGAGGTTTCGTAGCTTAACGACAGCGTTCTTCAGAGATGCTATGG GTTTTCTTCTACTTTTTGATCTGACAAATGAGCAAAGTTTCCTCAATGTCAGAAACTGGATAAGCCAGCTACAGA TGCATGCATATTGTGAAAACCCAGATATAGTGCTGTGGGAAACAAGAGTGATCTGGAGGACCAGAGAGTAGTGA AAGAGGAGGAAGCCATAGCACTCGCAGAGAAATATGGAATCCCCTACTTTGAAACTAGTGCTGCCAATGGGACAA ACATAAGCCAAGCAATTGAGATGCTTCTGGACCTGATAATGAAGCGAATGGAACGGTGTGTGGACAAGTCCTGGA TTCCTGAAGGAGTGGTGCGATCAAATGGTCATGCCTCTACGGATCAGTTAAGTGAAGAAAAGGAGAAAAGGGGCAT CATGGCACAGTGAGAGATTAATGGGCATTGTGTACAAATTGCTTCTCACCATCCCCATTAGACCTACGAATAAAG CATCCGGTTCTAAAATTAATTTGTTGCAGCTTTGTAAATATTTCTTTAAGATTCAGCCTGAGAGTTAGGAGAAAT ATTTCAGAGCCAAAAGTGCCTTATACAACCTTAGCCTATTATAGTAAATCATTCAAGGATTCAGAATTTTGCAGT TTACATTTAAGATCTTACATGCAGTTATAAAACCGCCACAGTCTTCAATCCAGATTTGAAGACTCATGCCATAGG TGACATTCTAAAATACCATTAAAGCCACTFAAATGTTAAATAAGAATATACATGCACATCAGCTCAATGTCTTTG AGTATTAATTTTATGTAAGCATTCTATTTAACATGAATATAGGACAAATCATGGCTATATCTATAGACCTTGGAT AAACTGGATTGACCAATTATACACTCACGGTGACTTTTTTATTGGTGGGAAGGGGATTGGGGTGGGCAGGCTGG CTTAATGTAATATGAGCAACCAAAGTGGGACTTCTGTCTCCCCGCTATATTCCCATTGCTCTGAATGGTTGATTG AAGGGTCAGGGAACTAGATTTTATGGCTTTAGTTCACTGTGATTGTACATTTATACTTGGCCTATGTGCTGGCCG CACCTGAACATAGCTGGTGCTTATGCCGAGTTATTTGTGATGAGTAAATATTTAGTTTCTTTTTCTTCATATTTA TAATGTTGATCTGGCATCCTCAGGCTGCAGCTTTATTAGCTTATAAATTACTCATCTCTGTCTTTACCAGCAGGC TCTGTATTGTTGATATTTGCAACTTGTTTTGCTTTTCCATTGGTGGAATTGAAATAATTAGTTTTTAATTACATA AGATGCCTGTTTGCTATTTGGTGGAAGATAGATGTTCATATTGAAGCAGTCACATTTGTACTGTAGTTCAATAAA AGAAAAATGAAGTATTCTGTAGCCTATATTTTTCATAGAGCTCATGAGCATTTACTGTACTTGCTGGGTCTTGCC AAGATCATTTATTCCGCTGCATTGCCAAAGTGTCTTCATACCAAATTAAAGGTGGTTTTAATATATGTTTCATGG TACATGTATTTTATGGTGGCAAATGTTTGGTAGAACTGTAATTAGAAAAATACAAGTATATTTGCGTGATGGTTA CACTAGAAGCCCAGACTTTACGACTACACAATATATTCATGTATCTAAACTGTACTTGTACCCCCTAAATTTATT TTTAAAAAAAAAAAAAAAAAAA

986/2682 FIGURE 910

MSDGDYDYLIKFLALGDSGVGKTSVLYQYTDGKFNSKFITTVGIDFREKRVVYRASGPDGATGRGQRIHLQLWDT AGQERFRSLTTAFFRDAMGFLLLFDLTNEQSFLNVRNWISQLQMHAYCENPDIVLCGNKSDLEDQRVVKEEEAIA LAEKYGIPYFETSAANGTNISQAIEMLLDLIMKRMERCVDKSWIPEGVVRSNGHASTDQLSEEKEKGACGC

987/2682 FIGURE 911

TGGAGTCCCTGTGCTAGGATTTTTCATCATAGCTGTGCTGATGAGCGCTCAGGAATCATGGGCTATCAAAGAAGA ACATGTGATCATCCAGGCCGAGTTCTATCTGAATCCTGACCAATCAGGCGAGTTTATGTTTGACTTTGATGGTGA TGAGATTTTCCATGTGGATATGGCAAAGAAGGAGACGGTCTGGCGGCTTGAAGAATTTGGACGATTTGCCAGCTT TGAGGCTCAAGGTGCATTGGCCAACATAGCTGTGGACAAAGCCAACCTGGAAATCATGACAAAGCGCTCCAACTA TACTCCGATCACCAATGTACCTCCAGAGGTAACTGTGCTCACGAACAGCCCTGTGGAACTGAGAGAGCCCAACGT CCTCATCTGTTTCATCGACAAGTTCACCCCACCAGTGGTCAATGTCACGTGGCTTCGAAATGGAAAACCTGTCAC CACAGGAGTGTCAGAGACAGTCTTCCTGCCCAGGGAAGACCACCTTTTCCGCAAGTTCCACTATCTCCCCTTCCT GCCCTCAACTGAGGACGTTTACGACTGCAGGGTGGAGCACTGGGGCTTGGATGAGCCTCTTCTCAAGCACTGGGA GTTTGATGCTCCAAGCCCTCTCCCAGAGACTACAGAGAACGTGGTGTGTGCCCTGGGCCTGACTGTGGGTCTGGT GGGCATCATTATTGGGACCATCTTCATCATCAAGGGAGTGCGCAAAAGCAATGCAGCAGAACGCAGGGGGCCTCT $\texttt{G}\underline{\textbf{TAA}} \texttt{GGCACATGGAGGTGATGTTTCTTAGAGAGAAGATCACTGAAGAAACTTCTGCTTTAATGACTTTACAA}$ AGCTGGCAATATTACAATCCTTGACCTCAGTGAAAGCAGTCATCTTCAGCGTTTTCCAGCCCTATAGCCACCCCA AGTGTGGTTATGCCTCCTCGATTGCTCCGTACTCTAACATCTAGCTGGCTTTCCCTGTCTATTGCCTTTTCCTGT ATCTATTTCCTCTATTTCCTATCATTTTATTATCACCATGCAATGCCTCTGGAATAAAACATACAGGAGTCTGT CTCTGCTATGGAATGCCCCATGGGGCTCTCTTGTGTACTTATTGTTTAAGGTTTCCTCAAACTGTGATTTTTCTG AACACAATAAACTATTTTGATGATCTTGGGTGGAAAA

988/2682 FIGURE 912

MAISGVPVLGFFIIAVLMSAQESWAIKEEHVIIQAEFYLNPDQSGEFMFDFDGDEIFHVDMAKKETVWRLEEFGR FASFEAQGALANIAVDKANLEIMTKRSNYTPITNVPPEVTVLTNSPVELREPNVLICFIDKFTPPVVNVTWLRNG KPVTTGVSETVFLPREDHLFRKFHYLPFLPSTEDVYDCRVEHWGLDEPLLKHWEFDAPSPLPETTENVVCALGLT VGLVGIIIGTIFIIKGVRKSNAAERRGPL

989/2682 FIGURE 913

TGCGGCCGCACCTGCAGGCGCAGAGTAGGTATGGAAGATCCCTCGAGATCCATTGTGCTCTAAAGCCGCCGGGGG TCCGTGTCCTGTCTCGGTTGGCCGGACCCGGGCCCGAGCCCGAGCAGTAGCCGGCGCCATGTCGGTGGTGGGCAT CGACCGCTGCACGCCGGCTTGCATTTCTTTTGGTCCTAAGAATCGTTCAATTGGAGCAGCAGCTAAAAGCCAGGT AATTTCTAATGCAAAGAACACAGTCCAAGGATTTAAAAGATTCCATGGCCGAGCATTCTCTGATCCATTTGTGGA GGCAGAAAAATCTAACCTTGCATATGATATTGTGCAGTGGCCTACAGGATTAACAGGTATAAAGGTGACATATAT GGAGGAAGAGCGAAATTTTACCACTGAGCAAGTGACTGCCATGCTTTTGTCCAAACTGAAGGAGACAGCCGAAAG TGTTCTTAAGAAGCCTGTAGTTGACTGTGTTGTTTCGGTTCCTTGTTTCTATACTGATGCAGAAAGACGATCAGT TGGAATCTATAAGCAGGATCTTCCTCGCTTAGAAGAGAAACCAAGAAATGTAGTTTTTGTAGACATGGGCCACTC TGCTTATCAAGTTTCTGTATGTGCATTTAATAGAGGAAAACTGAAAGTTCTGGCCACTGCATTTGACACGACATT GGGAGGTAGAAAATTTGATGAAGTGTTAGTAAATCACTTCTGTGAAGAATTTGGGAAGAAATACAAGCTAGACAT TAAGTCCAAAATCCGTGCATTATTACGACTCTCTCAGGAGTGTGAGAAACTCAAGAAATTGATGAGTGCAAATGC TTCAGATCTCCCTTTGAGCATTGAATGTTTTATGAATGTTGATGTTGTTCTGGAACTATGAATAGAGGCAAATT TCTGGAGATGTGCAATGATCTCTTAGCTAGAGTGGAGCCACCACTTCGTAGTGTTTTGGAACAAACCAAGTTAAA GAAAGAAGATATTTATGCAGTGGAGATAGTTGGTGGTGCTACACGAATCCCTGCGGTAAAAGAGAAGATCAGCAA ATTTTCGGTAAAGAACTTAGTACAACATTAAATGCTGATGAAGCTGTCACTCGAGGCTGTGCATTGCAGTGTGC CATCTTATCGCCTGCTTTCAAAGTCAGAGAATTTTCTATCACTGATGTAGTACCATATCCAATATCTCTGAGATG GAATTCTCCAGCTGAAGAAGGGTCAAGTGACTGTGAAGTCTTTTCCAAAAATCATGCTGCTCCTTTCTCTAAAGT TCTTACATTTTATAGAAAGGAACCTTTCACTCTTGAGGCCTACTACAGCTCTCCTCAGGATTTGCCCTATCCAGA TCCTGCTATAGCTCAGTTTTCAGTTCAGAAAGTCACTCCTCAGTCTGATGGCTCCAGTTCAAAAGTGAAAGTCAA AGTTCGAGTAAATGTCCATGGCATTTTCAGTGTGTCCAGTGCATCTTTAGTGGAGGTTCACAAGTCTGAGGAAAA TGAGGAGCCAATGGAAACAGATCAGAATGCAAAGGAGGAAGAAGATGCAAGTGGACCAGGAAGCACATGT TGAAGAGCAACAGCAGCAGACACCAGCAGAAAATAAGGCAGAGTCTGAAGAAATGGAGACCTCTCAAGCTGGATC CAAGGATAAAAAGATGGACCAACCACCCCAATGCCAAGAAGGCAAAAGTGAAGACCAGTACTGTGGACCTGCCAA TCGAGAATCAGCTATATGGCAGATAGACAGAGAGATGCTCAACTTGTACATTGAAAATGAGGGTAAGATGATCAT GCAGGATAAACTGGAGAAGGAGCGGAATGATGCTAAGAACGCAGTGGAGG

990/2682 FIGURE 914

MSVVGIDLGFQSCYVAVARAGGIETIANEYSDRCTPACISFGPKNRSIGAAAKSQVISNAKNTVQGFKRFHGRAF SDPFVEAEKSNLAYDIVQWPTGLTGIKVTYMEEERNFTTEQVTAMLLSKLKETAESVLKKPVVDCVVSVPCFYTD AERRSVMDATQIAGLNCLRLMNETTAVALAYGIYKQDLPRLEEKPRNVVFVDMGHSAYQVSVCAFNRGKLKVLAT AFDTTLGGRKFDEVLVNHFCEEFGKKYKLDIKSKIRALLRLSQECEKLKKLMSANASDLPLSIECFMNDVDVSGT MNRGKFLEMCNDLLARVEPPLRSVLEQTKLKKEDIYAVEIVGGATRIPAVKEKISKFFGKELSTTLNADEAVTRG CALQCAILSPAFKVREFSITDVVPYPISLRWNSPAEEGSSDCEVFSKNHAAPFSKVLTFYRKEPFTLEAYYSSPQ DLPYPDPAIAQFSVQKVTPQSDGSSSKVKVKVRVNVHGIFSVSSASLVEVHKSEENEEPMETDQNAKEEEKMQVD QEEPHVEEQQQQTPAENKAESEEMETSQAGSKDKKMDQPPQCQEGKSEDQYCGPANRESAIWQIDREMLNLYIEN EGKMIMQDKLEKERNDAKNAVEEYVYEMRDKLSGEYEKFVSEDDRNSFTLKLEDTENWLYEDGEDQPKQVYVDKL AELKNLGQPIKIRFQESEERPNYLKN

991/2682 FIGURE 915

GAATCAGGAAGACCAGCTCCTCCTACTGTCTTCTGTGTTACGGGATCAGCGTTCCTTGTTGAGTGGGACCTGAGT CTCTAGCTCTGCTTCTAGCTTTCCTGCCTCCTGCCAGTCAGAAATCTTCCAACTTGGAAGGGAGAACAAAGTCAG TCACCAGGCCAACTGGGTCATCAGCTGTAATCACTTGTGATCTTCCTGTAGAAAATGCCGTCTACACCCACTGGT ACCTACACCAGGAGGGGAAGGCCCCACAGCGTCTTCTGTACTATGACTCCTACAACTCCAGGGTTGTGTTGGAAT CAGGAATCAGTCGAGAAAAGTATCATACTTATGCAAGCACAGGGAAGAGCCTTAAATTTATACTGGAAAATCTAA TTGAACGTGACTCTGGGGTCTATTACTGTGCCACCTGGAAGGATTATTATAAGAAACTCTTTGGCAGTGGAACAA AAACAAAACTCCAGAAGGCTGGAACATATCTTTGTCTTCTTGAGAAATTTTTCCCAGATATTATTAAGATACATT AATTTAGCTGGTTAACGGTGCCAGAAGAGTCACTGGACAAAGAACACAGATGTATCGTCAGACATGAGAATAATA AAAACGGAATTGATCAAGAAATTATCTTTCCTCCAATAAAGACAGATGTCACCACAGTGGATCCCAAAGACAGTT ATTCAAAAGATGCAAATGATGTCACCACAGTGGATCCCAAATACAATTATTCAAAGGATGCAAATGATGTCATCA CAATGGATCCCAAAGACAATTGGTCAAAAGATGCAAATGATACACTACTGCTGCAGCTCACAAACACCTCTGCAT ATTACATGTACCTCCTCCTGCTCCTCAAGAGTGTGGTCTATTTTGCCATCATCACCTGCTGTCTGCTTGGAAGAA ${\tt CGGCTTTCTGCTGCAATGGAGAAAATCA}$ ${\tt CAGACGGTGGCACAAGGAGGCCATCTTTTCCTCATCGGTTATT}$ ACTATTCTATCATTATTGTATAATGGTTTTCAAACCAGTGGGCACACAGAGAACCTCAGTCTGTAATAACAATGA GGAATAGCCATGGCGATCTCCAGCACCAATCTCTCCATGTTTTCCACAGCTCCTCCAGCCAACCCAAATAGCGCC TGCTATAGTGTAGACAGCCTGCGGCTTCTAGCCTTGTCCCTCTTTAGTGTTCTTTAATCAGATAACTGCCTGGA AGCCTTTCATTTTACACGCCCTGAAGCAGTCTTCTTTGCTAGTTGAATTATGTGGTGTTTTTTCCGTAATAAGC AAAATAAATTT

992/2682 FIGURE 916

MLLALALLLAFLPPASQKSSNLEGRTKSVTRPTGSSAVITCDLPVENAVYTHWYLHQEGKAPQRLLYYDSYNSRV VLESGISREKYHTYASTGKSLKFILENLIERDSGVYYCATWKDYYKKLFGSGTTLVVTDKQLDADVSPKPTIFLP SIAETKLQKAGTYLCLLEKFFPDIIKIHWQEKKSNTILGSQEGNTMKTNDTYMKFSWLTVPEESLDKEHRCIVRH ENNKNGIDQEIIFPPIKTDVTTVDPKDSYSKDANDVTTVDPKYNYSKDANDVITMDPKDNWSKDANDTLLLQLTN TSAYYMYLLLLLKSVVYFAIITCCLLGRTAFCCNGEKS

993/2682 FIGURE 917

GAATTCCTTTTTTTGACTGAGTCTCCCTCTGTCACCTAGGCTGGAGTGCAGTGGCACAATCTTGGCTCGCTGCAA CCTTCACCCTTCACCTCCCAGGTCGAAGCGATTCTCCTGCCTCAGTCTCCCGAGTAGCTGGGATTACAGGCGTGC TCTTGAACTCTTGGCCTCAAATTATCTGCCCACCTCGGCCTCCCAAAGTGCTGGGATTACAGGCATGAGCCACCA TGCCCAGATGACAAGACTAATTTTTTATCCCTTTGGTTTATTGGCTACAACATCTTCTTGGAATCAGAGGTGAAT TTTTTCTTACCTTGGGATGCCTGAGACTAGGGGAGTATAGAATTCCAATTGGTAATTAAGGCATCTTTCTGCTCC GAAGGCATTAGCGTTTCTCATTACTAGGTCAATAACCTGAGGGAATCAATGGCTTTTTGCCGCTCTACCTCTTGT GTATCTCTTTGACTTTTCTTCTCTGTCTAGGGCATTCCTGAACTTGTCAATCAGGGACAGGCATTAGAGCCCAA ${\tt ACAGGATGCTTTCCAAGGCCAAGAAGCAGCAGTA} {\tt ATG} {\tt ATGGATCAGAAGGCAGGATTATATGGACAGACATACCC}$ AGCACAGGGGCCTCCAATGCAAGGAGGCTTTCATCTTCAGGGACAATCACCATCTTTTAACTCTATGATGAATCA GATGAACCAGCAAGGCAATTTTCCTCTCCAAGGAATGCACCCACGAGCCAACATCATGAGACCCCGGACAAACAC CCCCAAGCAACTTAGAATGCAGCTTCAGCAGAGGCTGCAGGGCCAGCAGTTTTTGAATCAGAGCCGACAGGCACT TGAATTGAAAATGGAAAACCCTACTGCTGGTGGTGCTGCTGATGAGGCCTATGATGCAGCCCCAGGTGAGCTC CCAGGAGGGTTTTCTTAATGCTCAAATGGGCGCCCAACGGAGGAGAGAGCTGCTAAGTCATCACTTCCGACAACA GCAACAGCAACAGCAACAGCAACAGGAGCAACCCCAGGTCTTCAGCCCACCTCCTAATGTGACTGCTCCCCC AGCATGGATGGCTTKYGGCAGGACCCACAATGCCACAAGCTCCTCCGCAACAAGTTTCCAATATCCAACCCCAAA TTATGGGAATGGGGACCAACCAACAAGATCCAGCCTTTGGGTCGAGTGTCTAAGTCCTCCCAATGCAATGATGT GAAGGGCTGGCCATCAGGAAATTTGGCCAGGAACAGCTCCTTTTCCCAGCAGCAGTTTGCCCACCAGGGGAATCC TGCAGTGTATAGTATGGTGCACATGAATGGCAGCAGTGGTCACATGGGACAGATGAACATGAACCCCATGCCCAT GTCTGGCATGCCTATGGGTCCTGATCAGAAATACTGCTGACATCTCTGCACCAGGACCTCTTAAGGAAACCACTG AGCTTTTGAGCTCCATCAAGGGTATTTTAAGTGATGTCATTTGAGCAGGACTGGATTTTAAGCCGAAGGGCAATA TCCAACGTGTTTTTCCCCCCTCCTTCCTGCTGTGTATCATGGTGTTCAAAACAGAAATGTTTTTTTGGCATTCCAC CTCCTAGGGATATAATTCTGGAGACATGGAGTGTTACTGATCATAAAACTTTTGTGTCACTTTTTCTGCCTTGC TAGCCAAAATCTCTTAAATACACGTAGGTGGGCCAGAGAACATTGGAAGAATCAAGAGAGATTAGAATATCTGGT TTCTCTAGTTGCAGTATTGGACAAAGAGCATAGTCCCAGCCTTCAGGTGTAGTAGTTCTGTTGACCCTTTGTC ${\tt CAGTGGAATTGGTGATTGTCCTTTACTAATGTTGTTGAGTTGCTCTGTCCCTATTATTTGCCCTAGCC}$ TTTCTCCTAATGGGGTTTTCATTTGCCATTCATGTCCCTGTAAAACTTCACCTCCAGGAACTGTCATGGATGTCC **AAATGGCTTTGCAGAAAGGAAATGAGATGACAGTATTTAATCGCAGCAGTAGCAAACTTTTCACATGCTAATGTG** CAGCTGAGTGCACTTTATTTAAAAAGAATGGATAAATGCAATATTCTTGAGGTCTTGAGGGAATAGTGAAACACA TGCCTATATGGTAGAGCAATAATGCTTTTTAAAAATAAACTTCTGAAAACCCAAGGCCAGGTACTGCATTCTGAA TCAGAATCTCGCAGTGTTTCTGTGAATAGATTTTTTTGTAAATATGACCTTTAAGATATTGTATTATGTAAAATA TGTATATACCTTTTTTTTTGTAGGTGCACAGCGXCTCATTTTTACAGAGTTTGTGAAGCTAAATATTTAACATTGT TGATTTCAGTAAGCTGTGTGGTGAGGCTXCCAGTGGAAGACATCCCTTGACTTTTGTGGCCTGGGGGAGGGGT AGTGCTCCACAGCTTTTCCTTCCCCXCCCCCAGCCTTAGATGCCTCGCTCTTTTCAATCTCTAATCTAAATGC TTTTTAAAGAGATTATTTGTTTAGATGTAGGCATTTTAATTTTTTTAAAAATTCCTCTACCAGAACTAAGCACTTT GTGTGTGTGTGTGTGAATGTTTAAGTATGTTACCTTTTCATCCCCTTTAGGAGCGTTTTCAGATTTTGGTTGC TAAGACCTGAATCCCATATTGAGATCTCGAGTAGAATCCTTGGTGTGTTCTGGTGTCTCAGCTGTCCCCT CATTCTACTAATGTGATGCTTTCATTATGTCCCTGTGGATTAGAATAGTGTCAGTTATTTCTTAAGTAACTCAGT CCCCTACCACTTTTCTGCTGTTGCCTCTCGGAATTC

994/2682 FIGURE 918

995/2682 FIGURE 919A

AAGGCCTCGGCCAGGGCCTCACGCGAAGGCGGCCGTGCCGCCGCTGCCCCCGGGGCCTCTCCTTCCCCAGGCGGG GATGCGGCCTGGAGCGAGGCTGGGCCCTGGGCCCTTGGCGCGATCCGCGTCACCGCCCAAGGCGAAGAAC CTCAACGGAGGGCTGCGGAGATCGGTAGCGCCTGCTGCCCCACCAGTTGTGACTTCTCACCAGGAGATTTGGTT TGGGCCAAGATGGAGGGTTACCCCTGGTGGCCTTGTCTGGTTTACAACCACCCCTTTGATGGAACATTCATCCGC GAGAAAGGGAAATCAGTCCGTGTTCATGTACAGTTTTTTGATGACAGCCCAACAAGGGGCTGGGTTAGCAAAAGG CTTTTAAAGCCATATACAGGTTCAAAATCAAAGGAAGCCCAGAAGGGAGGTCATTTTTACAGTGCAAAGCCTGAA GATGAGCCCTCAGAGCCAGAAGAGGAAGAGAGAGAGGTGGGGTAGGCACAACTTACGTAACAGATAAGAGTGAAGAA GATAATGAAATTGAGAGTGAAGAGGAAGTACAGCCTAAGACACAAGGATCTAGGCGAAGTAGCCGCCAAATAAAA AAACGAAGGTCATATCAGATTCTGAGAGTGACATTGGTGGCTCTGATGTGGAATTTAAGCCAGACACTAAGGAG GAAGGAAGCAGTGATGAAATAAGCAGTGGAGTGGGGGATAGTGAGAGTGAAGGCCTGAACAGCCCTGTCAAAGTT GCCACCAAACAAGCAACTAGCATTTCATCAGAAACCAAGAATACTTTGAGAGCTTTCTCTGCCCCTCAAAATTCT GAATCCCAAGCCCACGTTAGTGGAGGTGGTGATGACAGTAGTCGCCCTACTGTTTGGTATCATGAAACTTTAGAA TGGCTTAAGGAGGAAAAGAGAGAGATGAGCACAGGAGGAGGCCTGATCACCCCGATTTTGATGCATCTACACTC TATGTGCCTGAGGATTTCCTCAATTCTTGTACTCCTGGGATGAGGAAGTGGTGGCAGATTAAGTCTCAGAACTTT GATCTTGTCATCTGTTACAAGGTGGGGAAATTTTATGAGCTGTACCACATGGATGCTCTTATTGGAGTCAGTGAA CTGGGGCTGGTATTCATGAAAGGCAACTGGGCCCATTCTGGCTTTCCTGAAATTGCATTTGGCCGTTATTCAGAT TCCCTGGTGCAGAAGGGCTATAAAGTAGCACGAGTGGAACAGACTGAGACTCCAGAAATGATGGAGGCACGATGT GAAGATTCTTCTGGCCATACTCGTGCATATGGTGTGTGTTGTTGATACTTCACTGGGAAAGTTTTTCATAGGT CAGTTTTCAGATGATCGCCATTGTTCGAGATTTAGGACTCTAGTGGCACACTATCCCCCAGTACAAGTTTTATTT GAAAAAGGAAATCTCTCAAAGGAAACTAAAACAATTCTAAAGAGTTCATTGTCCTGTTCTCTCAGGAAGGTCTG ATACCCGGCTCCCAGTTTTGGGATGCATCCAAAACTTTGAGAACTCTCCTTGAGGAAGAATATTTTAGGGAAAAAG ${\tt CTAAGTGATGGCATTGGGGTGATGTTACCCCAGGTGCTTAAAGGTATGACTTCAGAGTCTGATTCCATTGGGTTG}$ ACACCAGGAGAAAAGTGAATTGGCCCTCTCTGCTCTAGGTGGTTGTGTCTTCTACCTCAAAAAATGCCTTATT GATCAGGAGCTTTTATCAATGGCTAATTTTGAAGAATATATTCCCTTGGATTCTGACACAGTCAGCACTACAAGA TCTGGTGCTATCTTCACCAAAGCCTATCAACGAATGGTGCTAGATGCAGTGACATTAAACAACTTGGAGATTTTT CTGAATGGAACAATGGTTCTACTGAAGGAACCCTACTAGAGAGGGTTGATACTTGCCATACTCCTTTTGGTAAG CGGCTCCTAAAGCAATGGCTTTGTGCCCCACTCTGTAACCATTATGCTATTAATGATCGTCTAGATGCCATAGAA GACCTCATGGTTGTGCCTGACAAAATCTCCGAAGTTGTAGAGCTTCTAAAGAAGCTTCCAGATCTTGAGAGGCTA CTCAGTAAAATTCATAATGTTGGGTCTCCCCTGAAGAGTCAGAACCACCCAGACAGCAGGGCTATAATGTATGAA ATAGGGATCATGGAAGAAGTTGCTGATGGTTTTAAGTCTAAAATCCTTAAGCAGGTCATCTCTCTGCAGACAAAA AATCCTGAAGGTCGTTTTCCTGATTTGACTGTAGAATTGAACCGATGGGATACAGCCTTTGACCATGAAAAGGCT CGAAAGACTGGACTTATTACTCCCAAAGCAGGCTTTGACTCTGATTATGACCAAGCTCTTGCTGACATAAGAGAA AATGAACAGAGCCTCCTGGAATACCTAGAGAAACAGCGCAACAGAATTGGCTGTAGGACCATAGTCTATTGGGGG ATTGGTAGGAACCGTTACCAGCTGGAAATTCCTGAGAATTTCACCACTCGCAATTTGCCAGAAGAATACGAGTTG AAATCTACCAAGAAGGGCTGTAAACGATACTGGACCAAAACTATTGAAAAGAAGTTGGCTAATCTCATAAATGCT GAAGAACGGAGGGATGTATCATTGAAGGACTGCATGCGGCGACTGTTCTATAACTTTGATAAAAATTACAAGGAC TGGCAGTCTGCTGTAGAGTGTATCGCAGTGTTGGATGTTTTACTGTGCCTGGCTAACTATAGTCGAGGGGGTGAT CCTTGCATTACGAAGACTTTTTTTGGAGATGATTTTATTCCTAATGACATTCTAATAGGCTGTGAGGAAGAGAG CAGGAAAATGGCAAAGCCTATTGTGTGCTTGTTACTGGACCAAATATGGGGGGCAAGTCTACGCTTATGAGACAG GCTGGCTTATTAGCTGTAATGGCCCAGATGGGTTGTTACGTCCCTGCTGAAGTGTGCAGGCTCACACCAATTGAT

996/2682 FIGURE 919B

997/2682 FIGURE 920

MSROSTLYSFFPKSPALSDANKASARASREGGRAAAAPGASPSPGGDAAWSEAGPGPRPLARSASPPKAKNLNGG LRRSVAPAAPTSCDFSPGDLVWAKMEGYPWWPCLVYNHPFDGTFIREKGKSVRVHVQFFDDSPTRGWVSKRLLKP YTGSKSKEAQKGGHFYSAKPEILRAMQRADEALNKDKIKRLELAVCDEPSEPEEEEEMEVGTTYVTDKSEEDNEI ESEEEVQPKTQGSRRSSRQIKKRRVISDSESDIGGSDVEFKPDTKEEGSSDEISSGVGDSESEGLNSPVKVARKR KRMVTGNGSLKRKSSRKETPSATKQATSISSETKNTLRAFSAPQNSESQAHVSGGGDDSSRPTVWYHETLEWLKE EKRRDEHRRRPDHPDFDASTLYVPEDFLNSCTPGMRKWWQIKSQNFDLVICYKVGKFYELYHMDALIGVSELGLV FMKGNWAHSGFPEIAFGRYSDSLVQKGYKVARVEQTETPEMMEARCRKMAHISKYDRVVRREICRIITKGTQTYS VLEGDPSENYSKYLLSLKEKEEDSSGHTRAYGVCFVDTSLGKFFIGQFSDDRHCSRFRTLVAHYPPVQVLFEKGN LSKETKTILKSSLSCSLQEGLIPGSQFWDASKTLRTLLEEEYFREKLSDGIGVMLPQVLKGMTSESDSIGLTPGE KSELALSALGGCVFYLKKCLIDQELLSMANFEEYIPLDSDTVSTTRSGAIFTKAYQRMVLDAVTLNNLEIFLNGT NGSTEGTLLERVDTCHTPFGKRLLKQWLCAPLCNHYAINDRLDAIEDLMVVPDKISEVVELLKKLPDLERLLSKI HNVGSPLKSQNHPDSRAIMYEETTYSKKKIIDFLSALEGFKVMCKIIGIMEEVADGFKSKILKQVISLQTKNPEG RFPDLTVELNRWDTAFDHEKARKTGLITPKAGFDSDYDQALADIRENEQSLLEYLEKQRNRIGCRTIVYWGIGRN RYOLEIPENFTTRNLPEEYELKSTKKGCKRYWTKTIEKKLANLINAEERRDVSLKDCMRRLFYNFDKNYKDWQSA VECIAVLDVLLCLANY SRGGDGPMCRPVILLPEDTPPFLELKGSRHPCITKTFFGDDFIPNDILIGCEEEEQENG ${\tt KAYCVLVTGPNMGGKSTLMRQAGLLAVMAQMGCYVPAEVCRLTPIDRVFTRLGASDRIMSGESTFFVELSETASI}$ LMHATAHSLVLVDELGRGTATFDGTAIANAVVKELAETIKCRTLFSTHYHSLVEDYSQNVAVRLGHMACMVENEC EDPSQETITFLYKFIKGACPKSYGFNAARLANLPEEVIQKGHRKAREFEKMNQSLRLFREVCLASERSTVDAEAV HKLLTLIKEL

998/2682 FIGURE 921

CACCTTCTGCCCTCCGCACACTTGGACCAGTGCTGTTGACCCGGAAGCGGACATTTCTGCAGCTATTCTAAGCA CACGTCGGCGGAGGGAGCGGGACGTGGCCAGCGGTCAGCGGCGAAGGAGGCCGGGCCCTGCGGGGATCACGGAA ATCCGGAAGAAATATCCGGACAGGGTCCCCTTGATTGTAGAGAAGGCTCCAAAAGCAAGGGTGCCTGATCTGGAC AGGAGGAAGTACCTAGTGCCCTCCGACCTTACCGATGGCCAGTTCTACCTTTTAATCCGGAAGAGAATCCACCTG GAGGACAGTCATGAGGAAGATGATTTTCTGTATGTGGCCTACAGTAATGAGAGTGTCTATGGGAAA**TGA**GTGGTT CGGCTCCCACCGTGAGGAGACAGAAGGTGAAGACATATAGAAACTTTACACCGCACACACCGTCAACGCATTTTC ACATGCTCAACTGATATTTTTTGTTGCTTCCTTGGCCCAGGGAGAAAGCATGTCAGGACAGAGCTGTTGGATTGG CTTTGATAGAGGAATGGGGATGATGTAATTTTATGGCATTCCTGAGATTTAATTTTTTGTGCAGTTTCATAGAAAG GTCGGTCAGGAGGTGGACAAGTTGGGGTCAGAGATGATGGCAGTCCAGCAGCAACTCCCTGTGCTCCCTTCTCTT TGGGCAGAGATTCTGTTTTTGACAGTTGCACAAGACAGGTAGGGAAAGGGGACTTGTGGTAGTGGGCCATACCTG GGGACGAAAAGAGCCCACTGTAATTGATGCATCGTGGCCCCCGATCTTCCGTATCCCACACTTCTTTTCTCCCA TCCCAGTTGCAATCTCACTCACAAACATCACAGTACCACCCCAGGGGCGGCAGTAGACACCAACCCAGAAATTTA GACAGGGATCTCTTATCTTTGGAAAATAGGGGTTAGGCATGAGGGTGGTTATGATTAAGAAGATAATTTTGTTGT TAAATAGCATTAAACTGGAATTGACAGAGTGAGTTGAGCATCTCTGTCTAACCTGCTCTTTCTCTCTGGTGCTCC TCATCTCACCCCTACCTTGGAATTTAATAAGCTTCAGGCATTTCCAATTGCAGACTAAAACCACTTCTACCATCT CCTCTAGTATTTCCATGTATCAGGACAGAGTGTCTTATGTAGGGAAGGGGCAGGTATGAAGTGAGGTAGATTA TCTATACCTCTCACTCATTCAGGATTCTCGCTCCCATGCTGCTGTCCCTTCATTCTCACACTCACAGGAATGCTA TGTGATGGCCAGCTGCTTCCTTCGTTATCCACTGCAGCTGCTAGTTAGAAAGGTTTGCAGGGATGACTTTT AGTAAATCATGGGGATTTTATTGATTTATTATCACTTATAGGATTTTGTGGGGTGGGAGTGGGAGCAGGAATTG CACTCAGACATGACATTCAATTCATCTCTGCAAATGAAAAGGGTTCTTCCTCTTGGGGGAAATCTGTGTGTCAG TTCTGTCAGCTGCAAGTTCTTGTGTAATGAAGTCAATGCTGTCAGGCCAAG

999/2682 FIGURE 922

MKFQYKEVHPFEYRKKEGEKIRKKYPDRVPLIVEKAPKARVPDLDRRKYLYPSDLTDGQFYLLIRKRIHLRPEDA LFFFVNNTIPPTSATMGQLYEDSHEEDDFLYVAYSNESVYGK

1000/2682 FIGURE 923

AGGAAGGAGCCTGTTACAGTCAAGGTGACGCATCCTTGCCGGGCCAGCCCGAACAGCAGCTGGGTCGGCAAGCGA CAGGAGCACGGGTCATCTTTTCCCCAGAGGCGTCGGAATCGACCTGTGCCACCCAGAGCCCGCGGAGCTGAGCAG CGGGGAGACGGAAGAGTTACAGAGGATCAAGTGGCACCGAAAGCAGCTCCTGGAGGACATCCAGAAGCTGAAGGA TGAGATTGCAGATGTGTTTGCCCAAATCGACTGCTTCGAGAGTGCGGAGGAGAGCCGGATGGCCCAGAAGGAGAA GGAGCTGTGTATTGGGCGCAAGAAGTTCAACATGGACCCCGCCAAGGGTATCCAGTATTTCATTGAGCACAAGCT GCTGACCCCTGACGTCCAGGACATTGCACGGTTCCTGTATAAAGGCGAGGGCCTCAACAAGACAGCCATTGGTAC CTACCTGGGGGAGAGGGATCCCATCAACCTGCAGGTCCTCCAGGCCTTCGTGGACTGCCACGAGTTCGCCAACCT CAACCTCGTCCAGGCCTCAGGCAGTTCCTGTGGAGCTTCCGGCTGCCGGGCGAGGCCCAGAAGATAGACCGGAT GATGGAGGCCTTTGCCACTCGATACTGCCTCTGCAACCCAGGCGTCTTCCAGTCCACAGACACCTGCTACGTGTT GTCCTTCTCCATCATCATGCTCAACACCAGCCTCCACAATCCCAACGTCCGGGACAGGCCGCCTTTCGAGCGCTT TGTGTCCATGAACCGCGGCATCAACAATGGTAGCGACCTGCCCGAGGACCAGCTGCGGAACCTCTTCGACAGCAT GGGTTGGCTGCTCAAGCTAGGGGGCCGCGTGAAGACGTGGAAACGGCGCTGGTTCATCCTGACCGACAACTGCCT CTACTACTTCGAGTTCACCACTGACAAGGAGCCACGGGGAATTATACCTCTTGAGAACCTCTCGGTGCAGAAGGT GGATGACCCCAAGAAGCCATTCTGCCTGGAGCTCTACAACCCTAGCTGCCGAGGCCAGAAAATCAAGGCCTGCAA GACCGATGGCGACGGCAGGGTGGTGGAGGGCAAGCACGAATCGTACCGCATCTCAGCCACCAGTGCCGAGGAACG TGACCAGTGGATCGAGTCCATCCGAGCCAGCATCACCCGTGTCCCCTTCTACGACCTGGTCTCTACTCGGAAGAA GAAGATTGCCAGCAAGCAGTGAGATTCCTGGAGGTGGCACTGGGGGCTGGTCACCCTGAGAGTCCCATCGCCTGC AGCACCTGGAGACCCACCTCCCACCCCAGTGCACTCTTTTGGGCCACAGACATCATTGCTGTTCCCCGTTACCTC GGCCCCTGGCCTGGGCACCCAGCTGCAGGCCCCTGCCCTACGTGCACTACAGGAAGGGGTGAGGAGGAGCAGCCA CTGCACTTAGATGCTGTCAGCCCTCAACGTAGGAGGGGCCGTGGGGTCCCTAAGTGATTCTTCTCCCTGGCAAGG CTCTTCCTTTCAGGGATATCTCTGCCAACCCTTCCCCTGTCCTCGGGTTGGGCCTTGGCCCTCTCTGCCTGAGAG AGCTCAGCACACACACACCTCAGACCCACGGACAGGACCCCGGGACAGAACCCCGGGAGCACTGCCCTAGGAGCC TGGACCCCACGAGCTCAGTCCCAGCTCTGCCTCTGACTCGCTGTGTACCCTCTGCCAAGTCATGCCCATTCTCTA GTTCTTGCAAAACTGCAGTGTTTGGACTAGAAACGTATTGGCCCCTGCTAGCCCTGTGCTCCAGCTTCCAGCTGG AGATGGCAGCCGTTATTTGCGGAGCCCAGGCTGACTCCGGATTCAACGTTGCTGGGGAGAGAAAAGCAGTATAGA CTCCACCTTCCAGGATGTCCATTTCGGGGAGAGGAGCAGGTGGGACCCTCAAGAAAATGACGGAGAACATCCCAG ACAGATGGGACTCAAGCAGGATGGGTGCTATATCCAAGAAGCCAAGAAGGGAGAGTTTCGTGCACTGTGGTTAAC AGGAGGGCCGCCTGGAGGCAGTGGCTGAGCCAGAAAGTAACACAGAGCTCATGCTTGGAGAGATAGAGTCTTGGC CATGGCTTTCCTGCAAGACCACTGACGAGCAGTCCCATGGTGATAAAGGGCAGCCCGGCGGGTCCCAGCATCTCG CCTGGCCTGGAGGAGGAGTCCACTAACAGGAAACACTTCTCACCCCCTCACACAGGCCCAGGGGAGCCCCTGGAG GGAAATTCCTTGGCAGGGGAACAGGAAATGTGGTCGCCTCTGCCCCACTGCCAGCCTGAGTGGGCAAGGAAGCAG TCCACAGGGTCAGGATGGAGTAGCTGCCTTGCGAGGTGGTGAGACTCCTGTCTCTGGAGGTCTGCAAGCACTGGT AGTGATATTGCAGCAGACAAGGTCTGGGTTGGGCGTCTGCAGGAGGAGACCTTGTGGGACATCTGAGGACATCCG ${\tt CAGATTCTTGTCAGCCTGTGAACTAGGCCCTGCCTCTGTCACCTCATTGGTCCATGAAGGAGCAGCCAGGGGTGG}$ TGGAAGGAGCACTGGGCTAGGGGTCAGGGGTCAGAGATTCTGTCCTGCTCCTGGGATGCACTGCCTACTCCCTTA GTCTACTCCCTTCCCCTCTCTGGTCCTCAGCTTCCTCCATCATGGAGGAGATGGGATCATGGATTTTCTGGGCAT

1001/2682 FIGURE 924

MDLCHPEPAELSSGETEELQRIKWHRKQLLEDIQKLKDEIADVFAQIDCFESAEESRMAQKEKELCIGRKKFNMD PAKGIQYFIEHKLLTPDVQDIARFLYKGEGLNKTAIGTYLGERDPINLQVLQAFVDCHEFANLNLVQALRQFLWS FRLPGEAQKIDRMMEAFATRYCLCNPGVFQSTDTCYVLSFSIIMLNTSLHNPNVRDRPPFERFVSMNRGINNGSD LPEDQLRNLFDSIKSEPFSIPEDDGNDLTHTFFNPDREGWLLKLGGRVKTWKRRWFILTDNCLYYFEFTTDKEPR GIIPLENLSVQKVDDPKKPFCLELYNPSCRGQKIKACKTDGDGRVVEGKHESYRISATSAEERDQWIESIRASIT RVPFYDLVSTRKKKIASKQ

1002/2682 FIGURE 925

CCGGTCGGATGCCGGACCGGGGGCACCGCTGAGGCGGTGGGTCCCCGACCTGCGAGACAGGTTTGGAAGCCCCCG CTGCGCCCAGTCCGTGCGGACCGCGAGGCCGCGGGCGGGTGGAGGCGCGTCTCCGGCACGATGAAGGATTTGGGG GCAGAGCACTTGGCAGGTCATGAAGGGGTCCAACTTCTCGGGTTGTTGAACGTCTACCTGGAACAAGAAGAGAGA TTCCAACCTCGAGAAAAAGGGCTGAGTTTGATTGAGGCTACCCCGGAGAATGATAACACTTTGTGTCCAGGATTG AGAAATGCCAAAGTTGAAGATTTAAGGAGTTTAGCCAACTTTTTTGGATCTTGCACTGAAACTTTTGTCCTGGCT GTCAATATTTTGGACAGGTTCTTGGCTCTTATGAAGGTGAAACCTAAACATTTGTCTTGCATTGGAGTCTGTTCT TGTAAATGTACTGCTTCTGACATAAAACGGATGGAAAAAATAATTTCAGAAAAATTGCACTATGAATTGGAAGCT AGCCTTGATAAACTAGAAGCTCAGCTGAAAGCTTGCAACTGCCGACTCATCTTTTCAAAAGCAAAACCATCTGTA TTAGCCTTGTGCCTTCTCAATTTGGAAGTGGAAACTTTGAAATCTGTTGAATTACTGGAAATTCTCTTGCTAGTT AAAAAACATTCCAAGATTAATGACACTGAGTTCTTCTACTGGAGAGAGTTGGTTTCTAAATGCCTAGCCGAGTAT TCTTCTCCTGAATGTTGCAAACCAGATCTTAAGAAGTTGGTTTGGATCGTTTCAAGGCGCACAGCCCAGAACCTC CACAACAGCTACTATAGTGTTCCTGAGCTGCCAACGATACCTGAGGGGGGGTTGTTTTGATGAAAGTGAAAGTGAG GACTCTTGTGAAGATATGAGTTGTGGAGAGGAGAGTCTCAGCAGCTCTCCCCAGTGATCAAGAGTGCACCTTC TTTTTCAACTTCAAAGTGGCACAAACACTGTGCTTTCCATCT<u>TAG</u>AAATCTGATTGTTCTGTCAGAATTTATATT TACAGGGTTTCAAAGCAATAAATGGGGGAATAGGTAGTTTCCTGGTTTAGCCCCCATCTAGTCAGGAATTAATAT GGGGTAGTGCCTCTTAAACCATTAACAGTACTTTAGACATTGGCACTTTATTTTTCTCGTAGATCTTTAGCTACT TTGGGGAGGAGGTGCTGATACCTTCAATTTGTTACTTTTCAAGATTTTTAAAAATAACTAGTGTAGCTTA TCTTAAACATTTTATAAAACCTTCAGATGTCTTTAAGCAGATTGGAAGTATGCAAGTGCTTCCTTAGCAGGGACA AATTATAATATTGACATTTCTGTGATTTTTATATATGTAATGTCTTAATTGAGATTTGTGTTAAGGCAGAAATAA TTAGGCTAGGGCTCTTAGTTTTCATTCCTATTGCCCCAAGTATTGTCAAACTATGGTATTATTTTAATGTTACTT TAAAAATCCATAATCTGCTAGTTTTGCATGTACTTATATGAAAACAGTGCAGTAAGTTGAAAACTCAGTATCTAT GGAATTGATAAATGTTGATCTGGTGTAGTATATTTTATCCGCATTTTCTTATATAAAAAATGTTCTGCATGATT ACATTTTATTTGCCTTTGT

1003/2682 FIGURE 926

MKDLGAEHLAGHEGVQLLGLLNVYLEQEERFQPREKGLSLIEATPENDNTLCPGLRNAKVEDLRSLANFFGSCTE TFVLAVNILDRFLALMKVKPKHLSCIGVCSFLLAARIVEEDCNIPSTHDVIRISQCKCTASDIKRMEKIISEKLH YELEATTALNFLHLYHTIILCHTSERKEILSLDKLEAQLKACNCRLIFSKAKPSVLALCLLNLEVETLKSVELLE ILLLVKKHSKINDTEFFYWRELVSKCLAEYSSPECCKPDLKKLVWIVSRRTAQNLHNSYYSVPELPTIPEGGCFD ESESEDSCEDMSCGEESLSSSPPSDQECTFFFNFKVAQTLCFPS

1004/2682 FIGURE 927

CCTTCCTTCGCTGCCTGCCCGCCCCACGCCTCGCTCACCGCCGCCGCTTCTCCCTGCCCCGCAGCGCGCAGG GACCATGTCGGCGGAGACCGCGAGCGGCCCCACAGAGGACCAGGTGGAAATCCTGGAGTACAACTTCAACAAGGT ATGGTTTAAGCAGCGCCTGGCAAAGTGGCGGCGCTCAGAAGGCCTGCCCTCAGAGTGCAGATCCGTCACAGACTA AGGAGATGGCAGGCATTGACAGCTTCACTCCATGAAGGCCATCTCTGTTTCTCTCCTCCGCTTAACCAAGCTGTT TAAATGTACATAATTAGAAAAGAAAATAACAATAGGAAGCTATGTGTATCTTCTGTGTAAAGCAGTGGCTTCACT GGAAAAATGGTGTGGCTAGCATTTCCCTTTGAGTCATGATGACAGATGGTGTGAAAAACCATCTAAGTTTGCTTTT GACCATCACCTCCCAGTAGCAATTTGCTTTCATAATCCATTTAGCAATCCAGGCCTCTGTTGAAAAGATAATATG AGGGAGAAGGGAACACATTTCCTTCTGAACTTACTTCCCTAAGTCACTTTCCTTATGTATCATCTAATACAATGA TGGTTGAGTGAAAATACAGAAGGGGTGTTTGAGTATTCAGATTTCATAAAACACTTCCTTGGAATATAGCTGCAT

1005/2682 FIGURE 928

MSAETASGPTEDQVEILEYNFNKVDKHPDSTTLCLIAAEAGLSEEETQKWFKQRLAKWRRSEGLPSECRSVTD

1006/2682 FIGURE 929

 $\tt TTTCTTGCCCCATACATACCTTGAGGCGAGCAAAAAAATTAAATTTAACC \underline{ATG} AGGGAAATCGTGCACATCCAG$ GCTGGTCAGTGTGGCAACCAGATCGGTGCCAAGTTCTGGGAGGTGATCAGTGATGAACATGGCATCGACCCCACC GGCACCTACCACGGGGACAGCGACCTGCAGCTGGACCGCATCTCTGTGTACTACAATGAAGCCACAGGTGGCAAA TATGTTCCTCGTGCCATCCTGGTGGATCTAGAACCTGGGACCATGGACTCTGTTCGCTCAGGTCCTTTTGGCCAG ATCTTTAGACCAGACAACTTTGTATTTGGTCAGTCTGGGGCAGGTAACAACTGGGCCAAAGGCCACTACACAGAG CAGCTGACCCACTCACTGGGCGGGGGCACAGGCTCTGGAATGGGCACTCTCCTTATCAGCAAGATCCGAGAAGAA TACCCTGATCGCATCATGAATACCTTCAGTGTGGTGCCTTCACCCAAAGTGTCTGACACCGTGGTCGAGCCCTAC AATGCCACCCTCTCCGTCCATCAGTTGGTAGAGAATACTGATGAGACCTATTGCATTGACAACGAGGCCCTCTAT GATATCTGCTTCCGCACTCTGAAGCTGACCACCCAACCTACGGGGATCTGAACCACCTTGTCTCAGCCACCATG AGTGGTGTCACCACCTGCCTCCGTTTCCCTGGCCAGCTCAATGCTGACCTCCGCAAGTTGGCAGTCAACATGGTC CCCTTCCCACGTCTCCATTTCTTTATGCCTGGCTTTGCCCCTCTCACCAGCCGTGGAAGCCAGCAGTATCGAGCT CTCACAGTGCCGGAACTCACCCAGCAGGTCTTCGATGCCAAGAACATGATGGCTGCCTGTGACCCCCGCCACGGC CGATACCTCACCGTGGCTGCTGTCTTCCGTGGTCGGATGTCCATGAAGGAGGTCGATGAGCAGATGCTTAACGTG CAGAACAAGAACAGCAGCTACTTTGTGGAATGGATCCCCAACAATGTCAAGACAGCCGTCTGTGACATCCCACCT CGTGGCCTCAAGATGGCAGTCACCTTCATTGGCAATAGCACAGCCATCCAGGAGCTCTTCAAGCGCATCTCGGAG CAGTTCACTGCCATGTTCCGCCGGAAGGCCTTCCTCCACTGGTACACAGGCGAGGGCATGGACGAGATGGAGTTC GAGGATTTCGGTGAGGAGGCCGAAGAGGGGCCTAAGGCAGAGCCCCCATCACCTCAGGCTTCTCAGTTCCCTTA GCTGAAAACACATGTAGATAATGGCCATCATCCTAAGCCCAAAGTAGAAAATGGTAGAAGGTAGTAGGAAGT CACTATATAAGGAAGGGGATGGGATTTTCCATTCTAAAAGTTTTGGAGAGGGAAATCCAGGCTATTAAAGTCACT AAATTTCTAAGTATGTCCATTTCCCATCTCAGCTTCAAGGGAGGTGTCAGCAGTATTATCTCCACTTTCAATCTC CCTCCAAGCTCTACTCTGGAGGAGTCTGTCCCACTCTGTCAAGTGGAATCCTTCCCTTTCCAACTCTACCTCCCT CACTCAGCTCCTTTCCCCTGATCAGAGAAAGGGATCAAGGGGGTTGGGAGGGGGGAAAGAGACCAGCCTTGGTCC CTAAGCCTCCAGAAACGTCTTCTTAATCCCCACCTTTTCTTACTCCCAAAAAAGAATGAACACCCCTGACTCTGG AGTGGTGTATACTGCCACATCAGTGTTTGAGTCAGTCCCCAGAGGAGAGGGGAACCCTCCTCCATCTTTTTTGCA ACATCTCATTTCTTCCTTTTGCTGTTGCTTCCCCCCTCACACTTGGTTTTGTTCTATCCTACATTTGAGATTT AATTGAAAAAAAAAAAAAAAAAAAAAAAAAAAA

1007/2682 FIGURE 930

MREIVHIQAGQCGNQIGAKFWEVISDEHGIDPTGTYHGDSDLQLDRISVYYNEATGGKYVPRAILVDLEPGTMDS VRSGPFGQIFRPDNFVFGQSGAGNNWAKGHYTEGAELVDSVLDVVRKEAESCDCLQGFQLTHSLGGGTGSGMGTL LISKIREEYPDRIMNTFSVVPSPKVSDTVVEPYNATLSVHQLVENTDETYCIDNEALYDICFRTLKLTTPTYGDL NHLVSATMSGVTTCLRFPGQLNADLRKLAVNMVPFPRLHFFMPGFAPLTSRGSQQYRALTVPELTQQVFDAKNMM AACDPRHGRYLTVAAVFRGRMSMKEVDEQMLNVQNKNSSYFVEWIPNNVKTAVCDIPPRGLKMAVTFIGNSTAIQ ELFKRISEQFTAMFRRKAFLHWYTGEGMDEMEFTEAESNMNDLVSEYQQYQDATAEEEEDFGEEAEEEA

1008/2682 FIGURE 931

GAATTGAACCACCCATTTTCCTTTCTTAGCCAAATCACCAAAATGTCCAGTTAGAACAAGAATTTAGCATTCTGC ${\tt AAAAGAAGTTAACAGCTGAGATAACGAGGAAATATTCTGAA} \underline{{\tt ATG}} {\tt GATCCCAAATATTTCATCTTAATTTTGTTTT}$ GTGGACACCTGAACAATACATTTTTTTCAAAGACAGAGACAATTACAACAGAGAAGCAGTCACAGCCTACCTTAT TCAGCGACACTTTTTCTGGACAATCAATATCACCTGCCAAAGTCACTGCTGGACAACCCAACACACGCTGTCTATA TAGCCAACACCTCCTCCCAGCAAGCCGTGTTCACCTCTGCCAGACAACTACCATCTGCCCGTACTTCTACCACAC AACCACCAAAGTCATTTGTCTATACTTTTACTCAACAATCATCATCTGTCCAGATCCCTTCTAGAAAACAAATAA CTGTTCATAATCCATCCACACAACCAACATCAACTGTCAAAAATTCACCTAGGAGTACACCAGGATTTATCTTAG ATACTACCAGTAACAAACAAACCCCACAAAAAAACAATTATAATTCAATAGCTGCCATACTAATTGGTGTACTTC TGACTTCTATGTTGGTAGCTATAAŤCATCATTGTACTTTGGAAATGCTTAAGGAAACCAGTTTTAAATGATCAAA ATTGGGCAGGTAGATCTCCATTTGCTGATGGAGAAACCCCTGACATTTGTATGGATAACATCAGAGAAAATGAAA TATCCACAAAACGTACATCAATCATTTCACTTACACCCTGGAAACCAAGCAAAAGCACACTTTTAGCAGATGACT AAGTAAATGGTACATCAGAAGATAGTGCTGATGGTTCAACAGTTGGAACTGCTGTTTCTTCTTCAGATGATGCAG GTCTGCCTCCACCACCTCCCCTTCTGGATTTGGAAGGACAGGAAAGTAACCAATCTGACAAACCCACAATGACAA ATAAATCTGAGATAATACAATCATTTCCACCGCTTGACTCACTTAACTTGCCCCTGCCACCAGTAGATTTTATGA AAAACCAAGAAGATTCCAACCTTGAGATCCAGTGTCAGGAGTTCTCTATTCCTCCCAACTCTGATCAAGATCTTA ATGAATCCCTGCCACCTCCACCTGCAGAACTGTTATAAATATTACAACTTGCTTTTTAGCTGATCTTCCATCCTC AAATGACTCTTTTTTTTTTTATTGTTAACATATAAAATGGCAACTGATAGTCAATTTTGATTTTATTCAGGA ATTTACTAATTATAGTACCTATCTTTAAAGTATAGTACATTTTACATATGTAAATGGTATGTTTCAATAATTTAA TGGTGAATAAACTTTTATGTTTCCATTTCAAAGACCAGGGTGGAGAGGAATAAGAGACTAAGTATATGCTTCAAG TTTTAAATTAATACCTCAAGTATTAAATAAATATTCCAAGTTTGTGGGAATGGGAGATTAAAATGCATGTTTGAG AGTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

1009/2682 FIGURE 932

MDPKYFILILFCGHLNNTFFSKTETITTEKQSQPTLFTSSMSQVLANSQNTTGNPLGQPTQFSDTFSGQSISPAK VTAGQPTPAVYTSSEKPEAHTSAGQPLAYNTKQPTPIANTSSQQAVFTSARQLPSARTSTTQPPKSFVYTFTQQS SSVQIPSRKQITVHNPSTQPTSTVKNSPRSTPGFILDTTSNKQTPQKNNYNSIAAILIGVLLTSMLVAIIIIVLW KCLRKPVLNDQNWAGRSPFADGETPDICMDNIRENEISTKRTSIISLTPWKPSKSTLLADDLEIKLFESSENIED SNNPKTEKIKDQVNGTSEDSADGSTVGTAVSSSDDAGLPPPPPLLDLEGQESNQSDKPTMTIVSPLPNDSTSLPP SLDCLNQDCGDHKSEIIQSFPPLDSLNLPLPPVDFMKNQEDSNLEIQCQEFSIPPNSDQDLNESLPPPPAELL

1010/2682 FIGURE 933A

CTCAAGGTGGACAACCTGACCTACCGCACCTCTCCCGACAGCTTGAGGCGCGTGTTCGAGAAGTACGGGCGCGTG GGCGACGTGTACATCCCGCGGGAGCCCCACACCAAGGCGCCCCGGGGCTTCGCTTTCGTCCGCTTTCACGACCGG CGCTATGGCCGCCGGGACCTGCCCCGCAGCCGCCAGGGAGAGCCACGCGGCAGGTCCAGAGGCGGCGGCTACGGA CGGCGGAGCCGCAGCTACGGGCGGGGGGGGCCCCAGGCGCGGCGACACCGCAGCCGATCCCGGGGTCCCAGC TGCTCCAGGTCCCGCAGCCGATCTCGCTATAGGGGTTCTCGCTATAGCCGGTCTCCCTACAGCCGATCTCCTTAC AGCCGGTCGCGCTACAGCCGCTCTCCCTACAGCAGATCTCGCTACAGGGAATCTCGCTACGGCGGATCTCACTAC AGCTCATCTGGTTACAGTAACTCTCGCTACAGCCGATATCACAGCCGGTCTCACTCGAAGTCTGGGTCCTCC ACTAGCTCTCGCTCTGCATCAACCTCCAAATCGAGCTCTGCGCGACGATCCAAGTCCTCCTCGGTCTCCAGGTCT CGCTCGCGGTCCAGGTCTTCATCTATGACCAGGAGTCCTCCCCGGGTATCCAAGAGGAAATCCAAGTCAAGGTCG CGATCCAAGAGGCCCCCCAAGTCTCCTGAAGAGGAAGGACAGATGTCCTCT**TAA**GAAAATGATGCATCAGGAAGC AACGTGATGGAGGACTTGGGGGAAAAGGATCACATACTCAGTCTATGGAAGCAACGTCCCTGGAAGAAGAGGCTG CCTATTGAAAAGGTTGTGTCACACTTTTCTACCTTTTTGCCAGTTTGAAGCTTTGCATCAGGTGGCAAAATTCAT TCTATGTGCCGTTTTGTTGTTATTCACATTTTATTGTAACTTAGGAGGTGAACGACCTAAGATTACGTTATTGGG TTTGGATATTTGAGGCAAAAATTTATTTTTATTTCTATAGTGATGACTGTTTTGGTTTGAAATGAACAGATTGGT AACCTAATTTGTGGCCTCCTGACTTTTAAGGAAACGTGTGCAGCCATTACACACAGCCTAACGCTGTCAAGACAT CCAGGTCTAAAAGGTAGTGTGACCCAAATTTGTATAAAGATTTTTCATGTGAAAGGACTGGGGTTTTAGCAAACA CAGGTCTAATCTCTTTTGTGTTTTTTGTGCACCAGGCCCGGCTGCGTAGCAGTTGAGTGATGCTGGTTAGCTATTA AGGTGGCCTGTTGCAGTGCAGAGTGCTGAGCTGCTTCCTGTTTTCTTGATTGCTCCTGGGGAAAACACGCCTT GTCCTGAAGAACAAATGGCTGTCCAGTTTATTAAAATGCCTGTCAACTGCACTTCCAGTCACCCAGGCCTTGCAG ATAAATAATGGAGCATGCAGTGAGCACATCTAGCTGACGATAATCACACCTTTTCCCCCGTCTTTTCTGAAAAAAT TGTAAATCTGATCATATCAACATGTATGAACTTAAAATATGGAGAATGTTATGGAAGAAATAGTTTATAAGTTTG TTAAGTACTTATAACATGGTTTATCTTTTTGATTATTAATTTTTTACGCTAACCATTGTTTCTGTAGTTAAAATT GTTTTCTTGGTGTTATCTTTTCTCAGAATAAAATTAGAAACTTTTGATGGAAAGTAGGTTGTTTTATTTTCTGTA TGACTTTTGAATATTTGTACTTTTGAGAAAATTATTAGCACCAAGTGTTTCTCAAAATATAATTTTTTAAAAAATC TCCCCGTCATAGCAGATCTCGCTCTCGTACATAAGATGATTGGTGACACTTTTTGTAGAACCCATGTTGTATACA GTTTTCCTTTATTCAGTACAATCTTTTCATTTTTTAATTCAAACTGTTTTGTTCAGAATGGGCTAAAGTGTTGAA TTGCATTCTTGTAATATCCCCTTGCTCCTAACATCTACATTCCCTTCGTGTCTTTGATAAATTGTATTTTAAGTG ATGTCATAGACAGGATTGTTTAAATTTAGTTAACTCCATACTCTTCAGACTGTGATATTGTGTAAATGTCTATCT GCCCTGGTTTGTGTGAACTGGGATGTTGGGGGTGTTTGTGGTTATCTTACCTGGGGAAGTTCTTATGTTTATCTT GCTTTTCATGTGTCTTTCTGTAGACATATCTGAAGAGATGGATTAAGAATGCTTTGGATTAAGGATTGTGGAGCA CATTTCAATCATTTTAGGATTGTCAAAAGGAGGATTGAGGAGGATCAGATCAATAATGGAGGCAATGGTATGACT CCAAGTGCTATTGTCACAGATGAAATTGGCAGTATTGACCTTATACTAAAAGGCAGGGGTTAAAAATGATTATAT **ACATTTTCCTTAAAACACTTGCAAACATTTTATTCAGTTGTCTTTAGCTACAATTGCTTTTGCTTTTTAAACCTTG** GCAATTGTGGCAAAATTATATTGCCCATTTTGTAGCAACTTATTTTGCTCCCTTCCCCCCATTTTTGTTTTAATA GGGACTAATGTGGGAAGAACTGGCTAATTTGTCACAGTGCTTAGTTACAACTGTTAATGTGTGACCTGCTGTTGG TGTACATGTGGGTACAGGGTGTTTTTAAATCCAACAAGATAGAGTATAATATCAATACTGCTAAATCTGCATGTC CTCTGTGTGACTGATAGAGCGTTGCTATTTCATTTTTTAAGACAAAATGAAAGCAAAATATAGAGTTCCAATGT ATTGGTGTAGATAATCTAGTTGGGAATACTTTTAAGTCTCACCTTCCCCTTTAAACTAATATTCATAATTGGTTC ATATGTTTAAAAGACTTTAATTTACAAATTAAATTGCAAATGGGAGCATTAGATTTAGACTTAGGTGGG TAGCAATGCCAGTAAACTTAAATTACGTAACTTCTTGCAACCACGAAACCTGTAATACGCTGTACAGTAACAAGT GTTGGCATTATCAGTTGAACTGTAAATACAAAATGCTTCTTCCAATTAGTCTCTATGATGATTAAGTTTCTAAAA TTTATCTGAACACCATTCAGAAACTTGTTTTGGGGAATTTGATAGTTATTGATGTGCATCTGTTAAACTGATGAC AGACATAACTCATCATTCCCCAGAAACCTTTTTTGATTACAGTATCTAACATTTTGCCTCCTCTTTTTTGGTTTT GCTGGTTATAAAGGTTTGGATTGGAGAGGGCTCACTGGATCCCAATCCTTGGAGCTGGATCATTGGATTCAAATC

1011/2682 FIGURE 933B

1012/2682 FIGURE 934

MSCGRPPPDVDGMITLKVDNLTYRTSPDSLRRVFEKYGRVGDVYIPREPHTKAPRGFAFVRFHDRRDAQDAEAAM DGAELDGRELRVQVARYGRRDLPRSRQGEPRGRSRGGGYGRRSRSYGRRSRSPRRRHRSRSRGPSCSRSRSRSY RGSRYSRSPYSRSPYSRSPYSRSPYSRSRYRESRYGGSHYSSSGYSNSRYSRYHSSRSHSKSGSSTSSRSASTSK SSSARRSKSSSVSRSRSRSRSSSSMTRSPPRVSKRKSKSRSRSKRPPKSPEEEGQMSS

1013/2682 FIGURE 935

GGCACGAGGGGAGTGGAAAGTTCTCCGGCAGCCCTGAGATCTCAAGAGTGACATTTGTGAGACCAGCTAATTTGA TTAAAATTCTCTTGGAATCAGCTTTGCTAGTATCATACCTGTGCCAGATTTCATCATCATCATCAAACAGCTGTTACAA CATAGTAGCCACTCTGTTGCTGGTCCTCAACTTTGAGAGGACAAGATCATTGCAGGATCCTTGTAGTAACTGCCC AGCTGGTACATTCTGTGATAATAACAGGAATCAGATTTGCAGTCCCTGTCCTCCAAATAGTTTCTCCAGCGCAGG CAATGCAGAGTGTGACTGCACTCCAGGGTTTCACTGCCTGGGGGCAGGATGCAGCATGTGTAACAGGATTGTAA ACAAGGTCAAGAACTGACAAAAAAAGGTTGTAAAGACTGTTGCTTTGGGACATTTAACGATCAGAAACGTGGCAT CTGTCGACCCTGGACAAACTGTTCTTTGGATGGAAAGTCTGTGCTTGTGAATGGGACGAAGGAGAGGACGTGGT CTGTGGACCATCTCCAGCCGACCTCTCTCCGGGAGCATCCTCTGTGACCCCGCCTGCCCCTGCGAGAGAGCCAGG ACACTCTCCGCAGATCATCTCCTTCTTTCTTGCGCTGACGTCGACTGCGTTGCTCTTCCTGCTGTTCTTCCTCAC GCTCCGTTTCTCTGTTGTTAAACGGGGCAGAAAGAAACTCCTGTATATATTCAAACAACCATTTATGAGACCAGT ACAAACTACTCAAGAGGAAGATGGCTGTAGCTGCCGATTTCCAGAAGAAGAAGAAGAAGGAGGATGTGAACTG<u>TGA</u>AA TGGAAGTCAATAGGGCTGTTGGGACTTTCTTGAAAAGAAGCAAGGAAATATGAGTCATCCGCTATCACAGCTTTC AAAAGCAAGAACACCATCCTACATAATACCCAGGATTCCCCCAACACACGTTCTTTTCTAAATGCCAATGAGTTG GCCTTTAAAAATGCACCACTTTTTTTTTTTTTTGACAGGGTCTCACTCTGTCACCCAGGCTGGAGTGCAGTGGC ACCACCATGGCTCTCTGCAGCCTTGACCTCTGGGAGCTCAAGTGATCCTCCTGCCTCAGTCTCCTGAGTAGCTGG GTACAGGCTGGTCTCAAACTCCTAGGTTCACTTTGGCCTCCCAAAGTGCTGGGATTACAGACATGAACTGCCAGG AAAGCATTTTCTAGATACCACTTAACAGGTTTGAGCTAGTTTTTTTGAAATCCAAAGAAAATTATAGTTTAAATT CATATGACAATAAGCCACGAGGTGCAGTAAGTACCCGACTAAAGTTTCCGTGGGTTCTGTCATGTAACACGACAT GCTCCACCGTCAGGGGGGGAGTATGAGCAGAGTGCCTGAGTTTAGGGTCAAGGACAAAAAACCTCAGGCCTGGAGG AAGTTTTGGAAAGAGTTCAAGTGTCTGTATATCCTATGGTCTTCTCCATCCTCACACCTTCTGCCTTTGTCCTGC TCCCTTTTAAGCCAGGTTACATTCTAAAAATTCTTAACTTTTAACATAATATTTTATACCAAAGCCAATAAATGA

1014/2682 FIGURE 936

MGNSCYNIVATLLLVLNFERTRSLQDPCSNCPAGTFCDNNRNQICSPCPPNSFSSAGGQRTCDICRQCKGVFRTR KECSSTSNAECDCTPGFHCLGAGCSMCEQDCKQGQELTKKGCKDCCFGTFNDQKRGICRPWTNCSLDGKSVLVNG TKERDVVCGPSPADLSPGASSVTPPAPAREPGHSPQIISFFLALTSTALLFLLFFLTLRFSVVKRGRKKLLYIFK QPFMRPVQTTQEEDGCSCRFPEEEEGGCEL

1015/2682 FIGURE 937A

ATCGCTGGCGGAGCCTGGGCCTGGCCTGTTACTTGGAGTTCCTGAAGAAGGAGGAGCTGAAGGAGTTCCAG CTTCTGCTCGCCAATAAAGCGCACTCCAGGAGCTCTTCGGGTGAGACACCCGCTCAGCCAGAGAAGACGAGTGGC ATGGAGGTGGCCTCGTACCTGGTGGCTCAGTATGGGGAGCAGCGGGCCTGGGACCTAGCCCTCCATACCTGGGAG CAGATGGGGCTGAGGTCACTGTGCGCCCAAGCCCAGGAAGGGGCAGGCCACTCTCCCTCATTCCCCTACAGCCCA AGTGAACCCCACCTGGGGTCTCCCAGCCAACCCACCTCCACCGCAGTGCTAATGCCCTGGATCCATGAATTGCCG GCGGGGTGCACCCAGGGCTCAGAGAGAGGGTTTTGAGACAGCTGCCTGACACATCTGGACGCCGCTGGAGAGAA ATCTCTGCCTCACCCCAAGCTCTTCCAAGCTCCCCAGACCATGAGTCTCCAAGCCAGGAGTCACCCAAC GCCCCACATCCACAGCAGTGCTGGGGAGCTGGGGATCCCCACCTCAGCCCAGCCTAGCACCCAGAGAGCAGGAG AAATCAGAGAAAGGCAGGCCCCATGGGCAGCGGTGGTAGGAACGCCCCCACAGGCGCACACCAGCCTACAGCCC CACCACCACCCATGGGAGCCTTCTGTGAGAGAGAGCCTCTGTTCCACATGGCCCTGGAAAAATGAGGATTTTAAC CAAAAATTCACACAGCTGCTACTTCTACAAAGACCTCACCCCAGAAGCCAAGATCCCCTGGTCAAGAGAAGCTGG CCTGATTATGTGGAGGAGAATCGAGGACATTTAATTGAGATCAGAGACTTATTTGGCCCAGGCCTGGATACCCAA TGGGGGAGAGGCCAGCTGTATGGGGACCGCTTCCAGCATGTCTTCTACTTCAGCTGCAGAGAGCCTGGCCCAGTCC AAGGTGGTGAGTCTCGCTGAGCTCATCGGAAAAGATGGGACAGCCACTCCGGCTCCCATTAGACAGATCCTGTCT AGGCCAGAGCGGCTGCTCTTCATCCTCGATGGTGTAGATGAGCCAGGATGGGTCTTGCAGGAGCCGAGTTCTGAG CTCTGTCTGCACTGGAGCCAGCCACAGCCGGCGGATGCACTGCTGGGCAGTTTGCTGGGGAAAACTATACTTCCC GAGGCATCCTTCCTGATCACGGCTCGGACCACAGCTCTGCAGAACCTCATTCCTTCTTTGGAGCAGGCACGTTGG GTAGAGGTCCTGGGGTTCTCTGAGTCCAGCAGGAAGGAATATTTCTACAGATATTTCACAGATGAAAGGCAAGCA ATTAGAGCCTTTAGGTTGGTCAAATCAAACAAAGAGCTCTGGGCCCTGTGTCTTGTGCCCTGGGTGTCCTGGCTG GCCTGCACTTGCCTGATGCAGCAGATGAAGCGGAAGGAAAAACTCACACTGACTTCCAAGACCACAACCCTC TGTCTACATTACCTTGCCCAGGCTCTCCAAGCTCAGCCATTGGGACCCCAGCTCAGAGACCTCTGCTCTCTGGCT GCTGAGGGCATCTGGCAAAAAAAGACCCTTTTCAGTCCAGATGACCTCAGGAAGCATGGGTTAGATGGGGCCATC TTCCAAGAGTTCTTTGCAGCAATGTCCTATGTCTTGGAGGATGAGAAGGGGAGAGGTAAACATTCTAATTGCATC ATAGATTTGGAAAAGACGCTAGAAGCATATGGAATACATGGCCTGTTTGGGGCATCAACCACACGTTTCCTATTG GGCCTGTTAAGTGATGAGGGGGAGAGAGAGATGGAGAACATCTTTCACTGCCGGCTGTCTCAGGGGAGGAACCTG ATGCAGTGGGTCCCGTCCCTGCAGCTGCTGCAGCCACACTCTCTGGAGTCCCTCCACTGCTTGTACGAGACT CGGAACAAAACGTTCCTGACACAAGTGATGGCCCATTTCGAAGAAATGGGCATGTGTGTAGAAACAGACATGGAG AGATCAACATGGAGCCCCACCATGGTAGTCCTGTTCAGGTGGGTCCCAGTCACAGATGCCTATTGGCAGATTCTC TTCTCCGTCCTCAAGGTCACCAGAAACCTGAAGGAGCTGGACCTAAGTGGAAACTCGCTGAGCCACTCTGCAGTG GCTGAGGACTGCAAGGACCTTGCCTTTGGGCTGAGAGCCAACCAGACCCTGACCGAGCTGGACCTGAGCTTCAAT GTGCTCACGGATGCTGGAGCCAAACACCTTTGCCAGAGACTGAGACAGCCGAGCTGCAAGCTACAGCGACTGCAG GAGCTAGACCTGCAGCAGAACAACCTGGATGACGTTGGCGTGCGACTGCTCTGTGAGGGGGCTCAGGCATCCTGCC TGCAAACTCATACGCCTGGGGCTGGACCAGACACTCTGAGTGATGAGATGAGGCAGGAACTGAGGGCCCTGGAG CAGGAGAAACCTCAGCTGCTCATCTTCAGCAGACGGAAACCAAGTGTGATGACCCCTACTGAGGGCCTGGATACG GGAGAGATGAGTAATAGCACATCCTCACTCAAGCGGCAGAGACTCGGATCAGAGAGGGCGGCTTCCCATGTTGCT CAGGCTAATCTCAAACTCCTGGACGTGAGCAAGATCTTCCCAATTGCTGAGATTGCAGAGGAAAGCTCCCCAGAG GTAGTACCGGTGGAACTCTTGTGCGTGCCTTCTCCTGCCTCTCAAGGGGACCTGCATACGAAGCCTTTGGGGACT GAGATTGAATTCTGTGTGTGGGACCAGTTCCTGGGTGAGATCAACCCACAGCACAGCTGGATGGTGGCAGGGCCT

1016/2682 FIGURE 937B

GAGCTGCATCACATAGTTCTGGAAAACCCCAGCTTCTCCCCCTTGGGAGTCCTCCTGAAAATGATCCATAATGCC CTGCGCTTCATTCCCGTCACCTCTGTGGTGTTGCTTTACCACCGCGTCCATCCTGAGGAAGTCACCTTCCACCTC TACCTGATCCCAAGTGACTGCTCCATTCGGAAGGCCATAGATGATCTAGAAATTCCAGTTTGTGCGAATC CACAAGCCACCCCGCTGACCCCACTTTATATGGGCTGTCGTTACACTGTGTCTGGGTCTGGTTCAGGGATGCTG GAAATACTCCCCAAGGAACTGGAGCTCTGCTATCGAAGCCCTGGAGAAGACCAGCTGTTCTCGGAGTTCTACGTT AAACCAGGAGATCTCATGCCTGCAACTACTCTGATCCCTCCAGCCCGCATAGCCGTACCTTCACCTCTGGATGCC CCGCAGTTGCTGCACTTTGTGGACCAGTATCGAGAGCAGCTGATAGCCCGAGTGACATCGGTGGAGGTTGTCTTG ATGCGGAAGCTGTTCAGCTTGAGCCAGTCCTGGGACCGGAAGTGCAAAGATGGACTCTACCAAGCCCTGAAGGAG ACCCATCCTCACCTCATTATGGAACTCTGGGAGAAGGGCAGCAAAAAGGGACTCCTGCCACTCAGCAGC<u>TGA</u>AGT ACAAGTTGCCATCTGGTTTGCCTTCCAGCACTAAAGTAATGGAACTTTGATGATGCCTTTGCTGGGCATTATGTG TCCATGCCAGGGATGCCACAGGGGGCCCCAGTCCAGGTGGCCTAACAGCATCTCAGGGAATGTCCATCTGGAGCT GGCAAGACCCCTGCAGACCTCATAGAGCCTCATCTGGTGGCCACAGCCAAGCCTAGAGCCCTCCGGATCCCA TCCAGGCGCAAAGAGGAATAGGAGGGACATGGAACCATTTGCCTCTGGCTGTCACAGGGTGAGCCCCAAAATT GGGGTTCAGCGTGGGAGGCCACGTGGATTCTTGGCTTTGTACAGGAAGATCTACAAGAGCAAGCCAACAGAGTAA AGTGGAAGGAAGTTTATTCAGAAAATAAAGGAGTATCACAGCTCTTTTAGAATTTGTCTAGCAGGCTTTCCAGTT

1017/2682 FIGURE 938

MAGGAWGRLACYLEFLKKEELKEFQLLLANKAHSRSSSGETPAQPEKTSGMEVASYLVAQYGEQRAWDLALHTWE QMGLRSLCAQAQEGAGHSPSFPYSPSEPHLGSPSQPTSTAVLMPWIHELPAGCTQGSERRVLRQLPDTSGRRWRE ISASLLYQALPSSPDHESPSQESPNAPTSTAVLGSWGSPPQPSLAPREQEAPGTQWPLDETSGIYYTEIRERERE KSEKGRPPWAAVVGTPPQAHTSLQPHHHPWEPSVRESLCSTWPWKNEDFNQKFTQLLLLQRPHPRSQDPLVKRSW PDYVEENRGHLIEIRDLFGPGLDTQEPRIVILQGAAGIGKSTLARQVKEAWGRGQLYGDRFQHVFYFSCRELAQS KVVSLAELIGKDGTATPAPIRQILSRPERLLFILDGVDEPGWVLQEPSSELCLHWSQPQPADALLGSLLGKTILP EASFLITARTTALQNLIPSLEQARWVEVLGFSESSRKEYFYRYFTDERQAIRAFRLVKSNKELWALCLVPWVSWL ${\tt ACTCLMQQMKRKEKLTLTSKTTTLCLHYLAQALQAQPLGPQLRDLCSLAAEGIWQKKTLFSPDDLRKHGLDGAI}$ ISTFLKMGILQEHPIPLSYSFIHLCFQEFFAAMSYVLEDEKGRGKHSNCIIDLEKTLEAYGIHGLFGASTTRFLL GLLSDEGEREMENIFHCRLSQGRNLMQWVPSLQLLLQPHSLESLHCLYETRNKTFLTQVMAHFEEMGMCVETDME LLVCTFCIKFSRHVKKLQLIEGRQHRSTWSPTMVVLFRWVPVTDAYWQILFSVLKVTRNLKELDLSGNSLSHSAV ${\tt KSLCKTLRRPRCLLETLRLAGCGLTAEDCKDLAFGLRANQTLTELDLSFNVLTDAGAKHLCQRLRQPSCKLQRLQ}$ LVSCGLTSDCCQDLASVLSASPSLKELDLQQNNLDDVGVRLLCEGLRHPACKLIRLGLDQTTLSDEMRQELRALE QEKPQLLIFSRRKPSVMTPTEGLDTGEMSNSTSSLKRQRLGSERAASHVAQANLKLLDVSKIFPIAEIAEESSPE VVPVELLCVPSPASQGDLHTKPLGTDDDFWGPTGPVATEVVDKEKNLYRVHFPVAGSYRWPNTGLCFVMREAVTV EIEFCVWDQFLGEINPQHSWMVAGPLLDIKAEPGAVEAVHLPHFVALQGGHVDTSLFQMAHFKEEGMLLEKPARV ELHHIVLENPSFSPLGVLLKMIHNALRFIPVTSVVLLYHRVHPEEVTFHLYLIPSDCSIRKAIDDLEMKFQFVRI HKPPPLTPLYMGCRYTVSGSGSGMLEILPKELELCYRSPGEDQLFSEFYVGHLGSGIRLQVKDKKDETLVWEALV KPGDLMPATTLIPPARIAVPSPLDAPQLLHFVDQYREQLIARVTSVEVVLDKLHGQVLSQEQYERVLAENTRPSQ MRKLFSLSQSWDRKCKDGLYQALKETHPHLIMELWEKGSKKGLLPLSS

1018/2682 FIGURE 939A

ACAGCACAGACAGATTGACCTATTGGGGTGTTTCGCGAGTGTGAGAGGGGAAGCGCCGGGCCTGTATTTCTAGAC GCGATGCTGCTGCTCAGCGCGGGCGGGGCCGAGGAGGAGGACAAGAAGGAGGACGTGGGCACGGTGGTCGGC ATCGACCTGGGGACCACCTACTCCTGCGTCGGCGTGTTCAAGAACGGCCGCGTGGAGATCATCGCCAACGATCAG GGCAACCGCATCACGCCGTCCTATGTCGCCTTCACTCCTGAAGGGGAACGTCTGATTGGCGATGCCGCCAAGAAC CAGCTCACCTCCAACCCCGAGAACACGGTCTTTGACGCCAAGCGGCTCATCGGCCGCACGTGGAATGACCCCGTCT GTGCAGCAGGACATCAAGTTCTTGCCGTTCAAGGTGGTTGAAAAGAAAACTAAACCATACATTCAAGTTGATATT GAGGCTTATTTGGGAAAGAAGGTTACCCATGCAGTTGTTACTGTACCAGCCTATTTTAATGATGCCCAACGCCAA GCAACCAAAGACGCTGGAACTATTGCTGGCCTAAATGTTATGAGGATCATCAACGAGCCTACGGCAGCTGCTATT GCTTATGGCCTGGATAAGAGGGAGGGGGGAGAAGAACATCCTGGTGTTTGACCTGGGTGGCGGAACCTTCGATGTG TCTCTTCTCACCATTGACAATGGTGTCTTCGAAGTTGTGGCCACTAATGGAGATACTCATCTGGGTGGAGAAGAC TTTGACCAGCGTGTCATGGAACACTTCATCAAACTGTACAAAAAGAAGACGGGCAAAGATGTCAGGAAAGACAAT GAAATTGAGTCCTTCTATGAAGGAGAAGACTTTTCTGAGACCCTGACTCGGGCCAAATTTGAAGAGCTCAACATG GATCTGTTCCGGTCTACTATGAAGCCCGTCCAGAAAGTGTTGGAAGATTCTGATTTGAAGAAGTCTGATATTGAT ${\tt GAAATTGTTCTTGTTGGTGGCTCGACTCGAATTCCAAAGATTCAGCAACTGGTTAAAGAGTTCTTCAATGGCAAG}.$ GAACCATCCCGTGGCATAAACCCAGATGAAGCTGTAGCGTATGGTGCTGCTGCTCCAGGCTGGTGTGCTCTTGGT GATCAAGATACAGGTGACCTGGTACTGCTTGATGTATGTCCCCTTACACTTGGTATTGAAACTGTGGGAGGTGTC ATGACCAAACTGATTCCAAGGAACACAGTGGTGCCTACCAAGAAGTCTCAGATCTTTTCTACAGCTTCTGATAAT CAACCAACTGTTACAATCAAGGTCTATGAAGGTGAAAGACCCCTGACAAAAGACAATCATCTTCTGGGTACATTT ATTCTTCGAGTGACAGCTGAAGACAAGGGTACAGGGAACAAAAATAAGATCACAATCACCAATGACCAGAATCGC CTGACACCTGAAGAAATCGAAAGGATGGTTAATGATGCTGAGAAGTTTGCTGAGGAAGACAAAAAGCTCAAGGAG CGCATTGATACTAGAAATGAGTTGGAAAGCTATGCCTATTCTCTAAAGAATCAGATTGGAGATAAAGAAAAGCTG GGAGGTAAACTTTCCTCTGAAGATAAGGAGACCATGGAAAAAGCTGTAGAAGAAAAGATTGAATGGCTGGAAAGC CACCAAGATGCTGACATTGAAGACTTCAAAGCTAAGAAGAAGGAACTGGAAGAAATTGTTCAACCAATTATCAGC AAACTCTATGGAAGTGCAGGCCCTCCCCCAACTGGTGAAGAGGGATACAGCAGAAAAAGATGAGTTG**TAG**ACACTG ATCTGCTAGTGCTGTAATATTGTAAATACTGGACTCAGGAACTTTTGTTAGGAAAAAATTGAAAGAACTTAAGTC TCGAATGTAATTGGAATCTTCACCTCAGAGTGGAGTTGAAACTGCTATAGCCTAAGCGGCTGTTTACTGCTTTTC ATTAGCAGTTGCTCACATGTCTTTGGGTGGGGGGGAGAAGAAGTTGGCCATCTTAAAAAGCAGGTAAAAAACC TGGGTTAGGGTGTGTTCACCTTCAAAATGTTCTATTTAACAACTGGGTCATGTGCATCTGGTGTAGGAAGTTT TTTCTACCATAAGTGACACCAATAAATGTTTGTTATTTACACTGGTCTAATGTTTGTGAGAAGCTTCTAATTAGA TCCTTCCACCTCAGTCTCCCAGCTAATTGAGACCACAGGCTTGTTACCACCATGCTCGGCTTTTGCATTAATCTA AGAAAAGGGGAGAGAGTTAATCCACATCTTTACTCAGGCAAGGGGCATTTCACAGTGCCCAAGAGTGGGGTTTT CTTGAACATACTTGGTTTCCTATTTCCCCTTATCTTTCTAAAACTGCCTTTCTGGTGGCTTTTTTTAAAATTATT TACACTTGGATTTCATTTGTAACTTTAGGATGTAAAGGTATATTGTGAACCCTAGCTGTGTCAGAATCTCCATCC CTGAAATTTCTCATTAGTGGTACTGGGGTGGGATCTTGGATGGTGACATTGAAACTACACTAAATCCCCTCACTA TGAATGGGTTGTTAAAGGCAATGGTTTGTGTCAAAACTGGTTTAGGATTACTTAGATTGTGTTCCTGAAGAAAAG AGTCCAGGTAAATGGTATGATCAATAAAGGACAGGCTGGTGCTAACATAAAATCCAATATTGTAATCCTAGCACT TTGGGAGGCCAAGGCGGGTGGATCACAAGGTCAAGAGATAGAGACCATCTTTGCCAACATGGTGAAACTCCATCT CTACTGAAAATACAAAAATTAGCTGGGCGTGGTAGTGCAAGCTGAAGGCTGAGGCAGGAGAATCACTCGAACCCG GGAGGCAGAGGTTGCAGTGAGCCGAGATCACACCACTGTACTCCAGCCCGGCACTCCAGCCTGGCGACAAGAGTG AGACTCCACCTCAAAAAAAAAAAAAAAGAATCCAATACTGCCCAAGGATAGGTATTTTATAGATGGGCAACTGGCT

1019/2682 FIGURE 939B

1020/2682 FIGURE 940

MKLSLVAAMLLLLSAARAEEEDKKEDVGTVVGIDLGTTYSCVGVFKNGRVEIIANDQGNRITPSYVAFTPEGERL IGDAAKNQLTSNPENTVFDAKRLIGRTWNDPSVQQDIKFLPFKVVEKKTKPYIQVDIGGGQTKTFAPEEISAMVL TKMKETAEAYLGKKVTHAVVTVPAYFNDAQRQATKDAGTIAGLNVMRIINEPTAAAIAYGLDKREGEKNILVFDL GGGTFDVSLLTIDNGVFEVVATNGDTHLGGEDFDQRVMEHFIKLYKKKTGKDVRKDNRAVQKLRREVEKAKRALS SQHQARIEIESFYEGEDFSETLTRAKFEELNMDLFRSTMKPVQKVLEDSDLKKSDIDEIVLVGGSTRIPKIQQLV KEFFNGKEPSRGINPDEAVAYGAAVQAGVLSGDQDTGDLVLLDVCPLTLGIETVGGVMTKLIPRNTVVPTKKSQI FSTASDNQPTVTIKVYEGERPLTKDNHLLGTFDLTGIPPAPRGVPQIEVTFEIDVNGILRVTAEDKGTGNKNKIT ITNDQNRLTPEEIERMVNDAEKFAEEDKKLKERIDTRNELESYAYSLKNQIGDKEKLGGKLSSEDKETMEKAVEE KIEWLESHQDADIEDFKAKKKELEEIVQPIISKLYGSAGPPPTGEEDTAEKDEL

1021/2682 FIGURE 941A

CGGCCGCCGGCATTCGCCGCGTGGTTCCCAGCGACCTGTATCCCCTCGTGCTCGGCCTTCCTGCGCGATAACCAAC TCTCAGAGGTGGCCAATAAGTTCGCCAAAGCGACAGGAGCTACACAGCAGGATGCCAATGCCTCTTCCCTCTTAG ACATCTATAGCTTCTGGCTCAAGTCTGCCAAGGTCCCAGAGCGAAAGTTACAGGCAAATGGACCAGTGGCTAAGA AAGCTAAGAAGAGGCCTCATCCAGTGACAGTGAGGACAGCAGCGAGGAGGAGGAGGAAGTTCAAGGGCCTCCAG CAAAGAAGGCTGCTGTACCTGCCAAGCGAGTCGGTCTGCCTCCTGGGAAGGCTGCAGCCAAAGCATCAGAGAGTA GCAGCAGTGAAGAGTCCAGTGATGATGATGAGGAGGACCAAAAGAAACAGCCTGTCCAGAAGGGAGTTAAGC CCCAAGCCAAGGCAGCCAAAGCTCCTCCTAAGAAGGCCAAGAGCTCTGATTCTGATTCTGACTCAAGCTCCGAGG ATGAGCCACCAAAGAACCAGAAGCCAAAGATAACACCTGTGACAGTTAAAGCTCAGACTAAAGCCCCTCCCAAAC GTGATGACTCAGAGGAGGAGGAGGCAGCCACCCCCAAGAAGGTCTGGACCATAACTTCTGTCAGGGCAGAGA $\verb|CTGTACCTAAAAAGCAAGTTGTGGCCAAGGCCCCAGTGAAAGCAGCTACCACCCCTACCCGGAAGAGTTCTAGCA|\\$ TCCCCCGCCTTCTGCTCCCCCACCAAAGAAGTCTCTGGGAACCCAGCCTCCCAAGAAGGCTGTGGAGAAGCAGC AGCCTGTGGAAAGCAGTGAAGACAGCAGTGATGAGTCTGATTCAAGTTCTGAAGAAGAAGAAAACCCCCAACTA ACTCTGACAGCTCTGAGGATGATGAAGCTCCTTCTAAGCCAGCTGGTACCACCAAGAATTCTTCAAATAAGCCAG CTGTCACCACCAAGTCACCTGCAGTGAAGCCAGCTGCAGCCCCCAAGCAACCTGTGGGCGGTGGCCAGAAGCTTC TGACGAGAAAGGCTGACAGCAGCTCCAGTGAGGAAGAGAGCAGCTCCAGTGAGGAGGAGAAGACAAAGAAGATGG GGGACAGCAGCTCTGATTCAGACAGCTCCAGCAGTGAGGAGGAGGAAGAGAGACATCTAAGTCTGCAGTTAAGA GCAACAGTTCTTCTGATGACTCCAGTGAGGAAGAGGAGAGAGCTCAAGGGCAAGGGCTCTCCAAGACCAC AAGCCCCAAGGCCAATGGCACCTCTGCACTGACTGCCCAGAATGGAAAAGCAGCTAAGAACAGTGAGGAGGAGG AAGAAGAAAAGAAAAAGGCGGCAGTGGTAGTTTCCAAATCAGGTTCATTAAAGAAGCGGAAGCAGAATGAGGCTG CCAAGGAGGCAGAGACTCCTCAGGCCAAGAAGATAAAGCTTCAGACCCCTAACACATTTCCAAAAAGGAAGAAAG GAGAAAAAAGGGCATCATCCCCATTCCGAAGGGTCAGGGAGGAGAAATTGAGGTGGATTCACGAGTTGCGGACA ACTCCTTTGATGCCAAGCGAGGTGCAGCCGGAGACTGGGGAGAGCCAATCAGGTTTTGAAGTTCACCAAAG GCAAGTCCTTTCGGCATGAGAAAACCAAGAAGAAGCGGGGCAGCTACCGGGGAGGCTCAATCTCTGTCCAGGTCA ATTCTATTAAGTTTGACAGCGAGTGACCTGAGGCCATCTTCGGTGAAGCAAGGGTGATGATCGGAGACTACTTAC TTTCTCCAGTGGACCTGGGAACCCTCAGGTCTCTAGGTGAGGGTCTTGATGAGGACAGAAGTTTAGAGTAGGTCC TAAGACTTTACAGTGTAACATCCTCTCTGGTCCTTTTCTGTGTTCCTAGTTTTGTACAGACTTGTTTTTGAGTGT GTGAAAGTCCTCATACTGAGAAATTTGTATATTTTATATTAAATCACTTACTATTGATTTTTGTTGTGATTTTCA **AAGGTGGATTCCCACAGATAAAATCTTGGCTATTGCCCAAAACATAGTAAAGGGTCACGTGTGACTTTTTATAAT** AGGAAGAAATTCTGCCTTTGTGAGTGCACATGTCCACATTTCATCCCTCCTTCCCTCAAAACCCTAGAGAGGGG CATTAAAGAATTGTTGATGTATATGCAATGTCTGTTAAGCATGCACTATGTATTTCATCCTCATTTATTGGGTCT GGGACTGAAGTTTTTAGCCAGCATGGACCTAACCTACTTTTTGGGATAAAATTCTCTGTTTTGTTACAGGCAAAA TTCTGGTATGGCGTGAATGCCATGGGTCATTCTGAATATATTTTTTTCTGTAATTTTATCATTACACGATGTTTG CAATACGTGCTTTGTTTTTTAATTTGAAAGCAAACTTTTCTACTGTTGAAAGACATTTTTTTGACAACTTGACCCT TCCTAGTATTGAGTTCTAAGTTGAGGACTGCATCTTCTCGTTTTTTACAGTATAGAGAACAAAATGACATTAGTT TGAAAAATACATATCACTTGGTATTGCTGTCTTGGTTGCAGTGGTGATACAGAATTGGTTTCATTAATTCCTACA AGATTACATTAGGTGAAATTATAGGTAATCTATGTATGTGCTAATGGGGTTGGAAAGAACCTTACAGAGCATATT ACCTGATAAACTGGAGTGGGTTTGGGAGAACAAACTAATAGGATTATTGTGTCTCCTAGTTGGTACCTGGGAGCA ATTGACATGCCCCTTCAGAACCTTAACTGTTAGTAGCAGTGGCTGTAACAACACAAACCAGTGACCAGAGATAA CAGCTTTTAGGCCAAGCTGGCCTGACGGTATGGCTGCAGGAAGTGACTGAGCAGTAGCGGTACTCAGCCAGACCA AGACGGAGAGGGAAGAGTCCACAGCTTTCTGGAAGCTAAGGCATTCTGGTGGTAGAAAAGTGTGCCCCAAGCCTT CATGGACGAGTTATAGGTCTTAAGATTAGTCTCCTCTTTTTTGGATTCCATACTTGCTAAATAACCTGATAATAA

1022/2682 FIGURE 941B

1023/2682 FIGURE 942A

TCTCACTATAGGGCTCGAGCGGCCGGGCAGGTCTGACCACAGTGGTTCCGGGGAGAAGCCTTCCAGGACCC ACTGCTCAGAAAGTACTGCAGCATGTCTTCAAATGCCTGAGGATCAAGTTGGAAAACTAGAAGCAACAGAAAACA ACAATGTGGTCCGGAAACAGGCAGAGGAAACCTATGAGAATATCCCAGGCCAGTCAAAGATCACATTCCTCTTAC AAGCCATCAGAAATACAACAGCTGCTGAAGAGGCTAGACAAATGGCCGCCGTTCTCCTAAGACGTCTCTTGTCCT CTGCATTTGATGAAGTCTATCCAGCACTTCCCTCTGATGTTCAGACTGCCATCAAGAGTGAGCTACTCATGATTA TTCAGATGGAAACACAATCTAGCATGAGGAAAAAAGTTTGTGATATTGCGGCAGAACTGGCCAGGAATTTAATAG TGCGGGAAGCTGCCCTTCACATTTTCTGGAACTTTCCTGGAATTTTTTGGGAACCAGCAACAACACTATTTAGATG TCATCAAACGAATGTTAGTTCAGTGTATGCAAGATCAGGAACACCCGTCGATCAGGACGTTATCTGCTAGAGCTA CAGCTGCATTTATACTTGCAAATGAGCATAATGTTGCTCTGTTCAAACATTTTGCAGACTTGCTACCGGGATTCC TACAGGCGGTAAATGACTCGTGCTACCAGAATGATGATTCTGTCCTAAAATCCCTCGTTGAGATTGCAGATACTG TTCCAAAGTATTTGCGTCCTCACTTGGAAGCAACTCTACAGCTAAGTCTAAAGTTGTGGGAGACACTAGCCTCA ACAATATGCAACGCCAGCTTGCCCTTGAAGTGATCGTCACCCTCTCTGAGACTGCAGCTGCTATGTTAAGAAAAC ATACCAATATTGTTGCACAGACTATTCCTCAGATGTTAGCAATGATGGTTGATTTGGAAGAAGATGAGGACTGGG CAAATGCAGATGAACTAGAAGATGATGTTTTGACAGCAATGCAGTTGCAGGCGAGAGTGCTCTAGATCGAATGG CTTGCGGACTTGGTGGAAAGCTCGTTCTGCCGATGATCAAGGAACACATTATGCAAATGCTTCAAAATCCTGACT TAAATGAGATCGTAAATTTTGTTTTACTTTTTCTCCAGGATCCTCATCCAAGAGTAAGGTATGCAGCCTGTAATG CCGTGGGACAGATGGCTACAGATTTTGCACCTGGTTTCCAAAAGAAATTTCATGAGAAGGTGATTGCAGCTCTGC TGCAGACCATGGAAGACCAAGGCAATCAACGTGTGCAGGCCCATGCAGCTGCTGCCCTCATTAACTTTACTGAAG ACTGTCCCAAGTCACTACTTATTCCATACTTGGATAATTTGGTGAAACATCTGCATTCCATTATGGTACTGAAGC TTCAAGAGCTGATTCAGAAAGGCACCAAGTTAGTTTTGGAACAAGTTGTGACATCCATTGCATCAGTTGCCGATA CTGCAGAAGAAAATTTGTCCCCTACTATGATTTATTTATGCCATCACTGAAGCACATCGTTGAGAATGCGGTTC ATGATCCTCAGATCTCTTACATGATCTCAGCATGGGCCAGAATGTGCAAAATCCTTGGAAAAAGAATTTCAGCAAT ACCTTCCAGTGGTTATGGGGCCTTTAATGAAGACGGCTTCAATTAAGCCCGAAGTAGCCCTTTTAGATACCCAAG ACATGGAGAATATGAGTGATGATGATGGTTGGGAATTTGTGAACCTTGGAGATCAGCAAAGCTTTGGTATTAAAA TGGAGTACACCGAACAGGTTGTCAAACTGATGGTCCCTTTACTGAAATTTTATTTCCACGATGGTGTTCGAGTGG CAGCAGCGGAATCCATGCCTCTTCTCCTGGAGTGTGCAAGAGTCCGTGGTCCTGAGTATCTCACACAGATGTGGC ATTTTATGTGTGATGCTCTAATTAAGGCCATTGGTACAGAACCAGATTCAGACGTCCTCTCAGAAATAATGCATT CTTTTGCAAAGTGCATTGAAGTAATGGGAGATGGATGCCTTAATAATGAACACTTTGAAGAACTGGGAGGTATAT TGAAAGCAAAGCTTGAAGAACATTTTAAAAATCAAGAATTACGACAAGTTAAAAAGACAAGATGAAGACTATGATG AACAGGTCGAAGAGTCACTACAAGATGAGGATGATAATGATGTTTATATTCTGACCAAAGTGTCAGATATTTTAC ACTCAATATTCAGTAGCTACAAAGAAAAGGTGTTACCATGGTTTGAACAGCTGCTTCCATTAATTGTCAACCTCA TTTGTCCACATAGACCATGGCCAGACAGACAATGGGGATTATGCATCTTTGATGATGTCATAGAACACTGTAGTC GGCAAGCAGCTGCATATGGCCTGGGAGTCATGGCACAGTACGGTGGAGATAATTATCGCCCTTTTTGTACAGAAG CACTTCCCCTGCTGGTAAGAGTTATTCAGTCTGCGGATTCTAAGACCAAAGAAAATGTCAATGCTACAGAGAACT GCATCTCAGCAGTAGGGAAAATCATGAAGTTCAAGCCTGACTGTTAAACGTTGAAGAGGTCCTTCCACACTGGT TGTCTTGGCTTCCACTACATGAAGATAAAGAAGAAGCTGTTCAGACTTTCAATTATCTGTGTGACCTGATTGAAA GTAATCATCCAATTGTTCTTGGCCCAAACAATACCAATCTGCCCAAAATATTTAGTATAATTGCGGAAGGAGAAA TGCACGAGGCAATTAAACATGAAGATCCTTGTGCCAAACGTCTGGCCAATGTCGTTCGCCAAGTACAGACTTCTG GAGGACTGTGGACTGAGTGCATAGCACAGCTCAGTCCTGAGCAGCCGGCCATTCAGGAGCTCCTGAACTCTG $\texttt{CG}\underline{\textbf{TGA}} \textbf{A} \textbf{GGGCCTTAATGTCACCCACCAGAAAACTAACTCCAAATAAACGCTTACCCTTTCCTTTAGGTTTCTTTG}$

1024/2682 FIGURE 942B

TTTTGTTTTTGAGCAAAAGAGATCGGTAGTGTTGTGTGTAGGCCATTCTTCTGGAGAGCCACAAGCAGGAAGAGC AGCGCTGTGTTGCAGAATGGAGTTTCCATGGATTTCTACCAGACCACTGAAGGAGTTCCTGGAAGCCCTGCGTAC TCGTTAGACATAAGGAAATTTAAGGAAAAACAGCTTTAAGAACAGTTACTCAGCGTAGATGTGTGTTCACACAAA TTGCCTTGCATTCAGTGTTCATTGTGAATTGGGAGTGTGAGTCTTTCTGTAGGGTACAAAGAAGCCTCCTACCCA AGTGTCATTGGCATGTCTGGCAGTAGTCTCTCATTCACTCCCAATAAACAACATTGAATACAAAAGAGGCTTGTG TAAAAACTCAGTACTGTCTGGCTTGGATTCATTTCATGTTTTTTAATATAAGAATGATCTAATATTTTTTAAAG TAATAGCTATCAGTAATAGCTGAGTGTTTTTTCCCCTAATATTTTCCTTGTGCAATTCAGACTTAAGCATCGAGT TTTTACCATCTTCCACTTAAGCTAAGTTATGATACCTATTCCATTCACAATTGGTGTTCTTTTTAAGGTTTGCA AATTTCAGCCAATTTTGTAGCTAAGATTGTTCTGATCAGCTCAAAAAGATTTGGCTTAGTGTTTTCATTGCAAAT TATAATTGCTGTAGAGCCACACACACTTTTGAACTTTTAATTATAAGTGTTATGGCTAAAGTTATTTACTGAAA ATTTCAGTAAAATGTGTGAATGTTTCTTTATGTATTAACCTCATAGCAGTAAATGACTTGCTGTTGTTTAATTTT TCTAAGGCATCTTAATAGACTTCTCTTGGAAAAACCTTTCCAAGGTGTTAACATTTTTATAGTTTGTACTAAATT ΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑ

1025/2682 FIGURE 943

MAAAAAEQQQFYLLLGNLLSPDNVVRKQAEETYEN IPGQSKITFLLQAIRNTTAAEEARQMAAVLLRRLLSSAFD EVYPALPSDVQTAIKSELLMIIQMETQSSMRKKVCDIAAELARNLIDEDGNNQWPEGLKFLFDSVSSQNVGLREA ALHIFWNFPGIFGNQQQHYLDVIKRMLVQCMQDQEHPSIRTLSARATAAFILANEHNVALFKHFADLLPGFLQAV NDSCYQNDDSVLKSLVEIADTVPKYLRPHLEATLQLSLKLCGDTSLNNMQRQLALEVIVTLSETAAAMLRKHTNI VAQTIPQMLAMMVDLEEDEDWANADELEDDDFDSNAVAGESALDRMACGLGGKLVLPMIKEHIMQMLQNPDWKYR HAGLMALSAIGEGCHQQMEGILNEIVNFVLLFLQDPHPRVRYAACNAVGQMATDFAPGFQKKFHEKVIAALLQTM EDQGNQRVQAHAAAALINFTEDCPKSLLIPYLDNLVKHLHSIMVLKLQELIQKGTKLVLEQVVTSIASVADTAEE KFVPYYDLFMPSLKHIVENAVQKELRLRGKTIECISLIGLAVGKEKFMQDASDVMQLLLKTQTDFNDMEDDDPQ ISYMISAWARMCKILGKEFQQYLPVVMGPLMKTASIKPEVALLDTQDMENMSDDDGWEFVNLGDQQSFGIKTAGL EEKSTACQMLVCYAKELKEGFVEYTEQVVKLMVPLLKFYFHDGVRVAAAESMPLLLECARVRGPEYLTQMWHFMC DALIKAIGTEPDSDVLSEIMHSFAKCIEVMGDGCLNNEHFEELGGILKAKLEEHFKNQELRQVKRQDEDYDEQVE ESLQDEDDNDVYILTKVSDILHSIFSSYKEKVLPWFEQLLPLIVNLICPHRPWPDRQWGLCIFDDVIEHCSPASF KYAEYFLRPMLQYVCDNSPEVRQAAAYGLGVMAQYGGDNYRPFCTEALPLLVRVIQSADSKTKENVNATENCISA VGKIMKFKPDCVNVEEVLPHWLSWLPLHEDKEEAVQTFNYLCDLIESNHPIVLGPNNTNLPKIFSIIAEGEMHEA IKHEDPCAKRLANVVRQVQTSGGLWTECIAQLSPEQQAAIQELLNSA

1026/2682 FIGURE 944

CAGTTGCTTCAGCGTCCCGGTGTGGCTGTGCCGTTGGTCCTGTGCGGTCACTTAGCCAAG<u>ATG</u>CCTGAGGAAACC CAGACCCAAGACCAACCGATGGAGGAGGAGGAGGTTGAGACGTTCGCCTTTCAGGCAGAAATTGCCCAGTTGATG TCATTGATCATCAATACTTTCTACTCGAACAAAGAGATCTTTCTGAGAGAGCTCATTTCAAATTCATCAGATGCA TTGGACAAAATCCGGTATGAAAGCTTGACAGATCCCAGTAAATTAGACTCTGGGAAAGAGCTGCATATTAACCTT ATACCGAACAAACAAGATCGAACTCTCACTATTGTGGATACTGGAATTGGAATGACCAAGGCTGACTTGATCAAT AACCTTGGTACTATCGCCAAGTCTGGGACCAAAGCGTTCATGGAAGCTTTGCAGGCTGGTGCAGATATCTCTATG ATTGGCCAGTTCGGTGTTGGTTTTTTTTTCTGCTTATTTGGTTGCTGAGAAAGTAACTGTGATCACCAAACATAAC GGTCGTGGAACAAAAGTTATCCTACACCTGAAAGAAGACCAAACTGAGTACTTGGAGGAACGAAGAATAAAGGAG ATTGTGAAGAAACATTCTCAGTTTATTGGATATCCCATTACTCTTTTTGTGGAGAAGGAACGTGATAAAGAAGTA CCTGAAATTGAAGATGTTGGTTCTGATGAGGAAGAAGAAGAAGAAGGATGGTGACAAGAAGAAGAAGAAGAAGAAGATT AAGGAAAAGTACATCGATCAAGAAGAGCTCAACAAAACAAAGCCCATCTGGACCAGAAATCCCGACGATATTACT AATGAGGAGTACGGAGAATTCTATAAGAGCTTGACCAATGACTGGGAAGATCACTTGGCAGTGAAGCATTTTTCA GTTGAAGGACAGTTGGAATTCAGAGCCCTTCTATTTGTCCCACGACGTGCTCCTTTTGATCTGTTTGAAAACAGA AAGAAAAGAACAACATCAAATTGTATGTACGCAGAGTTTTCATCATGGATAACTGTGAGGAGCTAATCCCTGAA TATCTGAACTTCATTAGAGGGGTGGTAGACTCGGAGGATCTCCCTCTAAACATATCCCGTGAGATGTTGCAACAA AGCAAAATTTTGAAAGTTATCAGGAAGAATTTGGTCAAAAAATGCTTAGAACTCTTTACTGAACTGGCGGAAGAT AAAGAGAACTACAAGAAATTCTATGAGCAGTTCTCTAAAAACATAAAGCTTGGAATACACGAAGACTCTCAAAAT $\tt CGGAAGAAGCTTTCAGAGCTGTTAAGGTACTACACATCTGCCTCTGGTGATGAGATGGTTTCTCTCAAGGACTAC$ TGCACCAGAATGAAGGAGAACCAGAAACATATCTATTATATCACAGGTGAGACCAAGGACCAGGTAGCTAACTCA GCCTTTGTGGAACGTCTTCGGAAACATGGCTTAGAAGTGATCTATATGATTGAGCCCATTGATGAGTACTGTGTC GAAGAGAAAAAGAAGCAGGAAGAGAAAAAAAACAAAGTTTGAGAACCTCTGCAAAATCATGAAAGACATATTGGAG AAAAAGTTGAAAAGGTGGTTGTCAAACCGATTGGTGACATCTCCATGCTGTATTGTCACAAGCACATATGGC TGGACAGCAAACATGGAGAGAATCATGAAAGCTCAAGCCCTAAGAGACAACTCAACAATGGGTTACATGGCAGCA AAGAAACACCTGGAGATAAACCCTGACCATTCCATTATTGAGACCTTAAGGCAAAAGGCAGAGGCTGATAAGAAC GACAAGTCTGTGAAGGATCTGGTCATCTTGCTTTATGAAACTGCGCTCCTGTCTTCTGGCTTCAGTCTGGAAGAT CCCCAGACACATGCTAACAGGATCTACAGGATGATCAAACTTGGTCTGGGTATTGATGAAGATGACCCTACTGCT GATGATACCAGTGCTGCTGTAACTGAAGAAATGCCACCCCTTGAAGGAGATGACGACACATCACGCATGGAAGAA GTAGAC**TAA**

1027/2682 FIGURE 945

MPEETQTQDQPMEEEEVETFAFQAEIAQLMSLIINTFYSNKEIFLRELISNSSDALDKIRYESLTDPSKLDSGKE LHINLIPNKQDRTLTIVDTGIGMTKADLINNLGTIAKSGTKAFMEALQAGADISMIGQFGVGFYSAYLVAEKVTV ITKHNDDEQYAWESSAGGSFTVRTDTGEPMGRGTKVILHLKEDQTEYLEERRIKEIVKKHSQFIGYPITLFVEKE RDKEVSDDEAEEKEDKEEEKEKESEDKPEIEDVGSDEEEEKKDGDKKKKKKIKEKYIDQEELNKTKPIWTRN PDDITNEEYGEFYKSLTNDWEDHLAVKHFSVEGQLEFRALLFVPRRAPFDLFENRKKKNNIKLYVRRVFIMDNCE ELIPEYLNFIRGVVDSEDLPLNISREMLQQSKILKVIRKNLVKKCLELFTELAEDKENYKKFYEQFSKNIKLGIH EDSQNRKKLSELLRYYTSASGDEMVSLKDYCTRMKENQKHIYYITGETKDQVANSAFVERLRKHGLEVIYMIEPI DEYCVQQLKEFEGKTLVSVTKEGLELPEDEEEKKKQEEKKTKFENLCKIMKDILEKKVEKVVVSNRLVTSPCCIV TSTYGWTANMERIMKAQALRDNSTMGYMAAKKHLEINPDHSIIETLRQKAEADKNDKSVKDLVILLYETALLSSG FSLEDPQTHANRIYRMIKLGLGIDEDDPTADDTSAAVTEEMPPLEGDDDTSRMEEVD

1028/2682 FIGURE 946

ATCCCCTCCGGTTTTCCTCAGTCTCCACGTACGTCCCTCAAAGCGCGTCCTAAAACCCGGATAACCGGAGCGCTC CCCATGGACCACACGGAGGGCTTGCCCGCGGAGGAGCCGCCTGCGCATGCTCCATCGCCTGGGAAATTTGGTGAG CGGCCTCCACCTAAACGACTTACTAGGGAAGCTATGCGAAATTATTTAAAAGAGCGAGGGGATCAAACAGTACTT CTTATGGGCAGCGGATGGAAGAAAAAAAAGAACAAATGGAACGCGATGGTTGTTCTGAACAAGAGTCTCAACCG GCCAAAACATTGTATATATCTGACTCAGACAAGCGAAAGCACTTCATTTTTCTGTAAAGATGTTCTATGGCAAC AGTGATGACATTGGTGTGTTCCTCAGCAAGCGGATAAAAGTCATCTCCAAAACCTTCCAAAAAAGAAGCAGTCATTG AAAAATGCTGACTTATGCATTGCCTCAGGAACAAAGGTGGCTCTGTTTAATCGACTACGATCCCAGACAGTTAGT ACCAGATACTTGCATGTAGAAGGAGGTAATTTTCATGCCAGTTCACAGCAGTGGGGAGCCTTTTTTATTCATCTC TTGGATGATGATGAATCAGAAGGAGAAGTCACAGTCCGAGATGTCTACATCCATTATGGACAAACATGCAAA CTTGTGTGCTCAGTTACTGGCATGGCACTCCCAAGATTGATAATTATGAAAGTTGATAAGCATACCGCATTATTG CTTTCTCAAGAAAGAATAATTCAATTTCAGGCCACTCCATGTCCAAAAGAACCAAATAAAGAGATGATAAATGAT GGCGCTTCCTGGACAATCATTAGCACAGATAAGGCAGAGTATACATTTTATGAGGGAATGGGCCCTGTCCTTGCC CCAGTCACTCCTGTGCCTGTGGTAGAGAGCCTTCAGTTGAATGGCGGTGGGGACGTAGCAATGCTTGAACTTACA GGACAGAATTTCACTCCAAATTTACGAGTGTGGGTTTGGGGATGTAGAAGCTGAAACTATGTACAGGTGTGGAGAG AGTATGCTCTGTGTCGTCCCAGACATTTCTGCATTCCGAGAAGGTTGGAGATGGGTCCGGCAACCAGTCCAGGTT CCAGTAACTTTGGTCCGAAATGATGGAATCATTTATTCCACCAGCCTTACCTTTACCTACACACCAGAACCAGGG CCACGGCCACATTGCAGTGTAGCAGGAGCAATCCTTCCAGCCAATTCAAGCCAGGTGCCCCCTAACGAATCAAAC ACAAACAGCGAGGGAAGTTACACAAAACGCCAGCACAAATTCAACCAGTGTCACATCATCTACAGCCACAGTGGTA TCCTA

1029/2682 FIGURE 947

MDHTEGLPAEEPPAHAPSPGKFGERPPPKRLTREAMRNYLKERGDQTVLILHAKVAQKSYGNEKRFFCPPPCVYL MGSGWKKKKEQMERDGCSEQESQPCAFIGIGNSDQEMQQLNLEGKNYCTAKTLYISDSDKRKHFIFSVKMFYGNS DDIGVFLSKRIKVISKPSKKKQSLKNADLCIASGTKVALFNRLRSQTVSTRYLHVEGGNFHASSQQWGAFFIHLL DDDESEGEEFTVRDVYIHYGQTCKLVCSVTGMALPRLIIMKVDKHTALLDADDPVSQLHKCAFYLKDTERMYLCL SQERIIQFQATPCPKEPNKEMINDGASWTIISTDKAEYTFYEGMGPVLAPVTPVPVVESLQLNGGGDVAMLELTG QNFTPNLRVWFGDVEAETMYRCGESMLCVVPDISAFREGWRWVRQPVQVPVTLVRNDGIIYSTSLTFTYTPEPGP RPHCSVAGAILPANSSQVPPNESNTNSEGSYTNASTNSTSVTSSTATVVS

1030/2682 FIGURE 948A

CGAAGGACCTGAAGGAAAGTGGAAAAGTCCAAAGTTTAAGATGCCAGAGATGCATTTTAAGACTCCAAAGATATC CATGCCAGATATTGACCTGAATCTCACAGGTCCAAAAATAAAAGGAGATGTGGATGTTACAGGCCCTAAGGTAGA GGGAGATCTGAAAGGTCCTGAAGTTGACCTCAAAGGCCCCCAAAGTGGACATTGATGTCCCAGATGTTAATGTTCA GGGTCCAGACTGGCACCTGAAGATGCCCAAGATGAAAATGCCTAAGTTCAGTATGCCTGGCTTCAAAGGAGAGGG CCCAGATGGTGGATGTGAAGCTGCCCATAGGCTGACATTGATGTCTCAGGACCAAAGTGGACATTGAAGGCCCTG ATGTTAACATTGAAGGACCAGAGGGAAAGTTGAAAGGGCCTAAGTTCAAGATGCCAGAGATGAATATCAAAGCCC CCAAGATCTCCATGCCTGATATTGACTTAAACCTGAAAGGACCCAAGTGAAGGGTGATGTGGATGTTTCCCTTCC TAAAGTGGAAGGTGACCTCAAGGGCCCAGAAGTTGACATCAAGGGCCCCAAAAGTGGACATTGACGCACCTGATGT TGATGTTCATGGCCCAGACTGGCACCTAAAGATGCCCAAGATGAAAATGCCCAAGTTCAGCATGCCTGGCTTCAA AGCAGAGGGCCCTGAAGCTGGAATGTGAACCTGCCCAAGGCTGACGTTGATGTCTCAGGCCCCAAAGTGGATATT AATGCCCCAGATGTGGGTGTTCAAGGCCCAGACTGCACCTGAAGATGCCCAAGGTGAAAATGCCAAAGTTCAGC ATGCCTGGCTTCAAAGGAGAGGGCCCAGATGGGGATGTGAAGCTGCCCAAGGCTGACATTGATGTCTCAGGACCC AAAGTGGACATTGAAGGCCCTGATGTTAACATTGAAGGACCAGAGGGAAAGTTGAAAGGGCCTAAGTTCAAGATG CCAGAGATGAATATCAAAGCCCCCAAGATCTCCATGCCTGATATTGACTTAAACCTGAAAGGACCCAAAGTGAAG GGTGATGTGGATGTTTCCCTTCCTAAAGTGGAAGGTGACCTCAAGGGCCCAGAAGTTGACATCAAGGGCCCAAAA GTGGACATTGACGCACCTGATGTTGATGTTCATGGCCCAGACTGGCACCTAAAGATGCCCCAAGATAAAAATGCCC AAGATCAGCATGCCTGGCTTCAAAGGAGAAGGTCCAGATGTGGACGTGAACCTGCCCAAGGCTGACATTGATGTC TCAGGACCGAAAGTGGATGTTGAATGTCCCGATGTGAATATCGAAGGACCTGAAGGAAAGTGGAAAAGTCCAAAG TTTAAGATGCCAGAGATGCATTTTAAGACTCCAAAGATATCCATGCCAGATATTGACCTGAATCTCACAGGTCCA AAAATAAAAGGAGATGTGGATGTTACAGGCCCTAAGGTAGAGGGAGATCTGAAAGGTCCTGAAGTTGACCTCAAA GGCCCCAAAGTGGACATTGATGTCCCAGATGTTAATGTTCAGGGTCCAGACTGGCACCTGAAGATGCCCAAGATG AAAATGCCCAAGTTCAGCATGCCTGGCTTCAAAGCAGAGGGCCCTGAAGTGGATGTGAACCTGCCCAAGGCTGAC GTTGATGTCTCAGGCCCCAAAGTGGACGTTGAAGGCCCTGATGTTAACATTGAAGGACCAGAGGGAAAGTTGAAA GGGCCCAAGTTCAAGATGCCAGAGATGAATATCAAAGCCCCCAAGATCCCCATGCCTGACTTTGATTTGCATCTG AAAGGTCCCAAGGTGAAGGGCGATGTGGATATTTCTCTGCCCAAAGTGGAAGGTGACCTCAAGGGCCCTGAAGTT GACATCAGGGGTCCCAAAGTGGACATTGATGTCCCGGATGTGGGCGTTCAAGGCCCAGACTGGCACCTAAAAATG CCCAAAGTGAAAATGCCCAAATTCAGCATGCCTGGCTTCAAAGGAGAGGGCCCAGATGTGGATGTGAACCTGCCC AAGGCTGACCTTGATGTCTCAGGACCCAAGGTGGACATTGATGTTCCAGATGTGAATATCGAAGGCCCAGAGGGA AAGTTGAAAGGTCCCAAATTCAAAATGCCTGAGATGAACATCAAAGCCCCCAAGATCTCCATGCCTGACATTGAT CTTAACCTGAAAGGTCCCAAAGTGAAGGGTGACATGGATGTGTCTCTGCCAAAAGTGGAAGGTGACATGAAAGTT CCTGACGTGGATATTAAAGGCCCCAAAGTGGATATTAATGCCCCAGATGTGGATGTTCAAGGCCCAGACTGGCAC CTGAAGATGCCTAAAATAAAAATGCCCAAGATCAGCATGCCTGGCTTCAAAGGAGAAGGTCCAGAAGTGGACGTG AACCTGCCCAAGGCTGACCTTGACGTCTCAGGACCCAAGGTGGACGTTGATGTTCCAGATGTGAATATTGAAGGT CCAGATGCGAAACTGAAGGGCCCTAAATTCAAGATGCCAGAGATGAACATCAAAGCCCCCAAGATCTCCATGCCT GACTTTGATTTGCATCTGAAAGGCCCTAAGGTGAAAGGAGATGTGGATGTTTCTCTGCCTAAGATGGAAGGTGAT CTAAAGGGTCCTGAAGTTGACATCAAGGGCCCCAAAGTGGACATTAATGCTCCAGATGTGGATGTTCAAGGCCCA GACTGGCACCTGAAGATGCCCAAGGTGAAAATGCCCAAGTTCAGCATGCCTGGCTTCAAAGGAGAGGGCCCAGAT GTGGATGTGAACCTGCCCAAGGCTGACCTTGATGTCTCAGGACCCAAGGTGGACATTGATGTTCCTGATGTGGAT ATCCGAAGGTCCAGAAGGGAAACTGAAAGGTCCCAAATTCAAGATGCCTGAGATGAGCATCCAAGCCCCCAAGAT CTCCATGCCTGATATTGACTTAAACCTGAAAGGACCCAAAGTGAAGGGCGATGTGGATGTTACCCTTCCTAAAGT GGAAGGTGACCTCAAGGGCCCAGAAGCTGACATCAAGGGCCCAAAAGTGGACATCAACACCCCTGATGTGGATGT TCATGGCCCAGACTGGCACCTGAAGATGCCCAAGGTGAAAATGCCCAAATTCAGCATGCCTGGCTTCAAAGGAGA AGGTCCAGATGTGGATGTGAACCTGCCCAAGGCTGACATTGATGTCTCAGGACCCAAAGTGGACGTTGATGTTCC TGATGTGAATATCGAAGGTCCAGATGCGAAACTAAAGGGCCCCCAAGTTCAAGATGCCTGAGATGAGCATCAAAGC CCCCAAGATCTCCATGCCTGATATTGACTTAAACCTGAAAGGACCCAAAGTGAAGGGCGATGTGGATGTTACCCT TCCTAAAGTGGAAGGTGACCTCAAGGGCCCAGAAGCTGACATCAAGGGCCCAAAAGTGGACATCAACACCCCTGA TGTGGATGTTCATGGCCCAGACTGGCACCTGAAGATGCCCAAGGTGAAAATGCCCAAATTCAGCATGCCTGGCTT CAAAGGAGAAGGTCCAGATGTGGATGTGAGCCTGCCCAAGGCCGACATCGATGTCTCGGGACCCAAGGTGGACGT

1031/2682 FIGURE 948B

TGATATTCCAGATGTGAATATCGAAGGTCCAGACGCAAAACTGAAGGGCCCCAAGTTCAAGATGCCTGAAATAAA TATCAAAGCTCCCAAGATCTCCATACCTGATGTTGACCTGGATTTGAAAGGACCCAAAGTAAAAGGAGATTTTGA TGTGTCTGTCCCTAAGGTTGAAGGGACTTTGAAAGGCCCAGAAGTAGATCTTAAAGGTCCACGTCTGGATTTCGA AGGCCCTGATGCCAAACTCAGTGGCCCATCTTTGAAGATGCCATCGCTGGAGATATCTGCTCCTAAAGTAACTGC TCCTGATGTTGATTTGCATCTCAAGGCACCAAAAATTGGATTTTCAGGTCCGAAGTTAGAAGGTGGAGGTGAAGTGGA CCTCAAGGGACCCAAAGTTGAAGCTCCAAGCTTAGATGTACACATGGACAGCCCAGATATTAACATCGAAGGGCC AGATGTTAAAATCCCCAAATTTAAGAAACCCAAGTTTGGATTTGGGGCAAAAAGCCCCAAAGCTGACATCAAGTC ACCTTCACTGGATGTCACTGTTCCTGAGGCAGAGCTGAACCTTGAGACTCCTGAAATTAGTGTTGGTGGCAAGGG ACCTGAATGTTCCTGGGGGTGAAATTGATGCCAGCCTCAAGGCTCCGGATGTAGATGTCAACATCGCAGGGCCGG ATGCTGCACTCAAAGTCGACGTGAAATCGCCCAAAACCAAGAAAACGATGTTTGGAAAAAATGTACTTCCCAGATG TAGAGTTTGACATTAAATCACCTAAATTTAAAGCTGAGGCCCCTCTCCCTAGCCCCAAACTGGAGGGTGAACTCC AGGCACCTGATCTGGAACTTTCTTTGCCAGCGATTCACGTCGAAGGTCTTGACATCAAGGCGAAGGCTCCCAAGG TCAAGATGCCAGATGTGGACATCTCAGTGCCAAAAATAGAGGGTGACCTGAAAGGGCCCCAAAGTGCAGGCAAACT TGGGTGCACCTGACATCAACATCGAAGGCCTAGATGCTAAAGTCAAAACACCGTCCTTCGGCATTTCTGCCCCTC AAGTCTCCATCCCTGATGTGAATGTAAACTTGAAAGGACCAAAGATAAAGGGTGATGTCCCCAGCGTGGGACTGG AAGGACCAGATGTAGATCTGCAAGGTCCAGAAGCAAAAATTAAGTTCCCCAAGTTTTCCATGCCCAAGATCGGCA TCCCAGGTGTGAAAATGGAGGGTGGGGGAGCCGAGGTCCATGCCCAGCTACCCTCTCTTGAAGGAGACTTGAGAG GACCAGATGTTAAGCTCGAAGGGCCCGATGTTTCTCTAAAGGGGCCAGGAGTAGACTTGCCTTCAGTGAACCTCT CTATGCCAAAAGTCTCTGGGCCTGACCTTGATCTGAACTTGAAAGGACCAAGTTTGAAGGGAGACCTGGATGCAT CTGTTCCCAGCATGAAGGTGCATGCTCCAGGGCTCAACCTCAGTGGTGTCGGTGGCAAAATGCAGGTGGGAGGAG ACGGTGTGAAAGTGCCAGGGATCGATGCCACAACAAAGCTTAACGTTGGGGCACCAGATGTGACACTGAGGGGAC CAAGCCTGCAGGGAGATCTGGCTGTCTCTGGTGACATCAAATGCCCTAAAGTATCCGTAGGAGCTCCTGATCTAA GCTTGGAGGCATCCGAAGGCAGCATTAAACTTCCCAAAATGAAGCTGCCCCAATTTGGCATCTCTACTCCGGGGT CCGACTTGCACGTCAATGCCAAGGGGCCACAGGTTTCTGGCGAACTGAAGGGGCCAGGTGTGGATGTGAACCTGA AAGGGCCTCGGATTTCAGCACCGAATGTGGACTTTAACTTGGAAGGACCAAAAGTGAAAGGGAGCCTTGGGGCCA CTGGTGAGATCAAAGGCCCCACTGTCGGAGGAGGTCTTCCAGGCATTGGTGTTCAAGGCCTAGAAGGAAACCTCC AGATGCCTGGAATTAAGTCCTCTGGATGTGATGTGAACCTGCCAGGCGTGAATGTGAAACTCCCAACTGGGCAGA TTTCTGGGCCTGAAATCAAAGGTGGTCTGAAAGGTTCAGAAGTAGGTTTCCATGGGGCTGCTCCTGATATCAGTG TGAAGGGGCCTGCCTTTAATATGGCATCTCCTGAGTCAGATTTTGGCATCAACTTGAAGGGCCCAAAAATCAAAG GAGGTGCGGATGTTTCAGGGGGTGTCAGTGCCCCAGACATCAGCCTTGGTGAAGGGCATTTGAGTGTTAAAGGTT CCGGGGGTGAGTGGAAGGGACCCCAAGTCTCCTCTGCTCTCAACTTGGACACATCTAAGTTTGCTGGGGGCCTTC ATTTCTCAGGACCAAAGGTGGAAGGAGGTGTGAAAGGAGGTCAGATTGGACTCCAGGCTCCTGGGCTGAGTGTGT CTGGGCCTCAAGGTCACTTGGAAAGTGGATCTGGAAAAGTAACATTCCCTAAAATGAAGATCCCCAAATTTACCT TCTCTGGCCGTGAGCTGGTTGGCAGAGAAATGGGGGTGGATGTTCACTTCCCTAAAGCAGAGGCCAGCATCCAAG CTGGTGCTGGAGACGGCGAGTGGGAAGAGTCTGAAGTCAAACTGAAAAAGTCCAAGATCAAAATGCCCAAGTTTA ATTTTCCAAACCTAAAGGGAAAGGTGGTGTCACTGGCTCACCAGAAGCATCAATTTCTGGGTCCAAAGGTGACC TGAAAAGTTCAAAGGCCAGCCTGGGCTCTCTGGAAGGAGGGCAGAGGCCGAAGCCTCTTCACCGAAAGGCAAAT CCACCCGACGGGGACGCTGGAGTTTGAAGGTGGGGAAGTGTCTCTGGAAGGTGGGAAAGTTAAAGGGAAACACG GGAAGCTGAAATTCGGTACCTTTGGTGGATTGGGGTCAAAGAGCAAAGGTCATTATGAGGTGACTGGGAGCGATG ATGAGACAGGCAAGTTACAGGGGAGTGGGGTGTCCCTGGCCTCTAAGAAGTCCCGACTGTCCTCCTCTAGCA CCTTTGTATGTGTGTACATATATATATATATATAACAAAACATCAGCCTTGGGTGGTGTTCCTATATAAACTCCA AAGGGAAACACCGACTGCCTCAGCAATCATGCAAAGACCTTGCCTGGCCCGGTGGCAAGCGCTGAAAAACCGA CCGCCTGTAGGCTCCTGGAACTATACAGATAGGTAAAGAGTTCCAAGTTCGTCCAGCCCATGTGCAAAGTCAACA TTTGTGTTTATTATCCTCATTTTTACTGAACATTGTTAGTTTTTGGGGTAATGGAAACCCACTTTTTCATTGTAAT

FIGURE 948C

1033/2682 FIGURE 949

MPKVKMPKFSMPGFKGEGPDGDVKLPKADIDVSGPKVDIEGPDVNIEGPEGKLKGPKFKMPEMNIKAPKISMPDI DLNLKGPKVKGDVDVSLPKVEGDLKGPEVDIKGPKVDIDAPDVDVHGPDWHLKMPKIKMPKISMPGFKGEGPDVD VNLPKADIDVSGPKVDVECPDVNIEGPEGKWKSPKFKMPEMHFKTPKISMPDIDLNLTGPKIKGDVDVTGPKVEG $\verb|DLKGPEVDLKGPKVDIDVPDVNVQGPDWHLKMPKMKMPKFSMPGFKAEGPEVDVNLPKADVDVSGPKVDVEGPDV|\\$ NIEGPEGKLKGPKFKMPEMNIKAPKIPMPDFDLHLKGPKVKGDVDISLPKVEGDLKGPEVDIRGPKVDIDVPDVG VQGPDWHLKMPKVKMPKFSMPGFKGEGPDVDVNLPKADLDVSGPKVDIDVPDVNIEGPEGKLKGPKFKMPEMNIK ${\tt APKISMPDIDLNLKGPKVKGDMDVSLPKVEGDMKVPDVDIKGPKVDINAPDVDVQGPDWHLKMPKIKMPKISMPG}$ FKGEGPEVDVNLPKADLDVSGPKVDVDVPDVNIEGPDAKLKGPKFKMPEMNIKAPKISMPDFDLHLKGPKVKGDV DVSLPKMEGDLKGPEVDIKGPKVDINAPDVDVQGPDWHLKMPKVKMPKFSMPGFKGEGPDVDVNLPKADLDVSGP KVDIDVPDVDIRRSRRETERSQIQDAEMSIQAPKISMPDIDLNLKGPKVKGDVDVTLPKVEGDLKGPEADIKGPK VDINTPDVDVHGPDWHLKMPKVKMPKFSMPGFKGEGPDVDVNLPKADIDVSGPKVDVDVPDVNIEGPDAKLKGPK FKMPEMSIKAPKISMPDIDLNLKGPKVKGDVDVTLPKVEGDLKGPEADIKGPKVDINTPDVDVHGPDWHLKMPKV KMPKFSMPGFKGEGPDVDVSLPKADIDVSGPKVDVDIPDVNIEGPDAKLKGPKFKMPEINIKAPKISIPDVDLDL KGPKVKGDFDVSVPKVEGTLKGPEVDLKGPRLDFEGPDAKLSGPSLKMPSLEISAPKVTAPDVDLHLKAPKIGFS GPKLEGGEVDLKGPKVEAPSLDVHMDSPDINIEGPDVKIPKFKKPKFGFGAKSPKADIKSPSLDVTVPEAELNLE TPEISVGGKGKKSKFKMPKIHMSGPKIKAKKTGIDLNVPGGEIDASLKAPDVDVNIAGPDAALKVDVKSPKTKKT MFGKMYFPDVEFDIKSPKFKAEAPLPSPKLEGELQAPDLELSLPAIHVEGLDIKAKAPKVKMPDVDISVPKIEGD LKGPKVQANLGAPDINIEGLDAKVKTPSFGISAPQVSIPDVNVNLKGPKIKGDVPSVGLEGPDVDLQGPEAKIKF PKFSMPKIGIPGVKMEGGGAEVHAQLPSLEGDLRGPDVKLEGPDVSLKGPGVDLPSVNLSMPKVSGPDLDLNLKG PSLKGDLDASVPSMKVHAPGLNLSGVGGKMQVGGDGVKVPGIDATTKLNVGAPDVTLRGPSLQGDLAVSGDIKCP KVSVGAPDLSLEASEGSIKLPKMKLPQFGISTPGSDLHVNAKGPQVSGELKGPGVDVNLKGPRISAPNVDFNLEG PKVKGSLGATGEIKGPTVGGGLPGIGVQGLEGNLQMPGIKSSGCDVNLPGVNVKLPTGQISGPEIKGGLKGSEVG FHGAAPDISVKGPAFNMASPESDFGINLKGPKIKGGADVSGGVSAPDISLGEGHLSVKGSGGEWKGPQVSSALNL DTSKFAGGLHFSGPKVEGGVKGGQIGLQAPGLSVSGPQGHLESGSGKVTFPKMKIPKFTFSGRELVGREMGVDVH FPKAEASIQAGAGDGEWEESEVKLKKSKIKMPKFNFSKPKGKGGVTGSPEASISGSKGDLKSSKASLGSLEGEAE AEASSPKGKFSLFKSKKPRHRSNSFSDEREFSGPSTPTGTLEFEGGEVSLEGGKVKGKHGKLKFGTFGGLGSKSK GHYEVTGSDDETGKLQGSGVSLASKKSRLSSSSSNDSGNKVGIQLPEVELSVSTKKE

1034/2682 FIGURE 950

GTGCGGTTGGGAACGCGGAGCGGACGGATTCGATTCAACGGGGTTCCGGACCGCGCTGCGCT**ATG**GAGCAGGTCA ATGAGCTGAAGGAAAAGGCAACAAGGCCCTGAGCGTGGGTAACATCGATGATGCCTTACAGTGCTACTCCGAAG CTATTAAGCTGGATCCCCACAACCACGTGCTGTACAGCAACCGTTCTGCTGCCTATGCCAAGAAAGGAGACTACC AGAAGGCTTATGAGGATGGCTGCAAGACTGTCGACCTAAAGCCTGACTGGGGCAAGGGCTATTCACGAAAAGCAG CAGCTCTAGAGTTCTTAAACCGCTTTGAAGAAGCCAAGCGAACCTATGAGGAGGGCTTAAAAACACGAGGCAAATA ACCCTCAACTGAAAGAGGGTTTACAGAATATGGAGGCCAGGTTGGCAGAGAAAATTCATGAACCCTTTCAACA TGATAGAGCAGCTACGAAACAAGCCTTCTGACCTGGGCACGAAACTACAAGATCCCCGGATCATGACCACTCTCA GCGTCCTCCTTGGGGTCGATCTGGGCAGTATGGATGAGGAGGAAGAGATTGCAACACCTCCACCACCACCCCCTC AGCTGGGGAACGATGCCTACAAGAAGAAGACTTTGACACAGCCTTGAAGCATTACGACAAAGCCAAGGAGCTGG ACCCCACTACATGACTTACATTACCAATCAAGCAGCGGTATACTTTGAAAAGGGCGACTACAATAAGTGCCGGG AGCTTTGTGAGAAGGCCATTGAAGTGGGGAGAGAAAACCGAGAAGACTATCGACAGATTGCCAAAGCATATGCTC ACCGAACCCCAGATGTGCTCAAGAAATGCCAGCAGGCAGAAAATCCTGAAGGAGCAAGAGCGGCTGGCCTACA TAAACCCCGACCTGGCTTTGGAGGAGAAGAACAAAGGCAACGAGTGTTTTCAGAAAGGGGACTATCCCCAGGCCA CCAAACTCCTGGAGTTCCAGCTGGCACTCAAGGACTGTGAGGAATGTATCCAGCTGGAGCCGACCTTCATCAAGG GTTATACACGGAAAGCCGCTGCGCTGGAAGCGATGAAGGACTACACCAAAGCCATGGATGTGTACCAGAAGGCGC TAGACCTGGACTCCAGCTGTAAGGAGGCGGCAGACGGCTACCAGCGCTGTATGATGGCGCAGTACAACCGGCACG ACAGCCCGAAGATGTGAAGCGACGACCCATGGCCGACCCTGAGGTGCAGCAGATCATGAGTGACCCAGCCATGC GCCTTATCCTGGAACAGATGCAGAAGGACCCCCAGGCACTCAGCGAACACTTAAAGAATCCTGTAATAGCACAGA $AGATCCAGAAGCTGATGGATGTGGGTCTGATTGCAATTCGG\underline{TGA}$ TGACTTGTTCATCCCCCCTTCCCTTCGCCCT TCTCTATATTTATACATAACCCCGGGGAAGACACAGAGACTCGTACCTGCGCTGTTTGTGCCGCCGCTGCCTCTG GGCCCTCCCAGCACACGCATGGTCTCTTCACCGCTGCCCTCGAGTTCCATGTCTCTTTCCCCTGCCCCTAGTTGC TCTTCCAGCCTCAGGTCCCAGCTGTCTCACGTTGTTTATTCTGCGTCCCCTTCTCCAATAAAACAAGCCAGTTGG GCGTGGTTATAAC

1035/2682 FIGURE 951

MEQVNELKEKGNKALSVGNIDDALQCYSEAIKLDPHNHVLYSNRSAAYAKKGDYQKAYEDGCKTVDLKPDWGKGY SRKAAALEFLNRFEEAKRTYEEGLKHEANNPQLKEGLQNMEARLAERKFMNPFNMPNLYQKLESDPRTRTLLSDP TYRELIEQLRNKPSDLGTKLQDPRIMTTLSVLLGVDLGSMDEEEEIATPPPPPPPRKETKPEPMEEDLPENKKQA LKEKELGNDAYKKKDFDTALKHYDKAKELDPTNMTYITNQAAVYFEKGDYNKCRELCEKAIEVGRENREDYRQIA KAYARIGNSYFKEEKYKDAIHFYNKSLAEHRTPDVLKKCQQAEKILKEQERLAYINPDLALEEKNKGNECFQKGD YPQAMKHYTEAIKRNPKDAKLYSNRAACYTKLLEFQLALKDCEECIQLEPTFIKGYTRKAAALEAMKDYTKAMDV YQKALDLDSSCKEAADGYQRCMMAQYNRHDSPEDVKRRAMADPEVQQIMSDPAMRLILEQMQKDPQALSEHLKNP VIAQKIQKLMDVGLIAIR

1036/2682 FIGURE 952

GCCGCTCGCTCGCTCCCTGGCTCGCTCCCTGCCTCCCGCGTCGCAGCCCCCGCCGTAGCCGCCTCCGAG $\tt CCCGCCGCCACATCCTCTGAGAAG{\color{red} ATG} GCTGTGCCACCCACGTATGCCGATCTTGGCAAATCTGCCAGGGATGTC}$ TTCACCAAGGGCTATGGATTTGGCTTAATAAAGCTTGATTTGAAAACAAAATCTGAGAATGGATTGGAATTTACA AGCTCAGGCTCAGCCAACACTGAGACCACCAAAGTGACGGGCAGTCTGGAAACCAAGTACAGATGGACTGAGTAC GGCCTGACGTTTACAGAGAAATGGAATACCGACAATACACTAGGCACCGAGATTACTGTGGAAGATCAGCTTGCA TACAAGCGGGAGCACATTAACCTGGGCTGCGACATGGATTTCGACATTGCTGGGCCTTCCATCCGGGGTGCTCTG GTGCTAGGTTACGAGGGCTGGCTGGCCGGCTACCAGATGAATTTTGAGACTGCAAAATCCCGAGTGACCCAGAGC AACTTTGCAGTTGGCTACAAGACTGATGAATTCCAGCTTCACACTAATGTGAATGACGGGACAGAGTTTGGCGGC TCCATTTACCAGAAAGTGAACAAGAAGTTGGAGACCGCTGTCAATCTTGCCTGGACAGCAGGAAACAGTAACACG CGCTTCGGAATAGCAGCCAAGTATCAGATTGACCCTGACGCCTGCTTCTCGGCTAAAGTGAACAACTCCAGCCTG ATAGGTTTAGGATACACTCAGACTCTAAAGCCAGGTATTAAACTGACACTGTCAGCTCTTCTGGATGGCAAGAAC GTCAATGCTGGTGGCCACAAGCTTGGTCTAGGACTGGAATTTCAAGCA**TAA**ATGAATACTGTACAATTGTTTAAT TTTAAACTATTTTGCAGCATAGCTACCTTCAGAATTTAGTGTATCTTTTAATGTTGTATGTCTGGGATGCAAGTA TTGCTAAATATGTTAGCCCTCCAGGTTAAAGTTGATTCAGCTTTAAGATGTTACCCTTCCAGAGGTACAGAAGAA ACCTATTTCCAAAAAAGGTCCTTTCAGTGGTAGACTCGGGGAGAACTTGGTGGCCCCTTTGAGATGCCAGGTTTC TTTTTTATCTAGAAATGGCTGCAAGTGGAAGCGGATAATATGTAGGCACTTTGTAAATTCATATTGAGTAAATGA ATGAAATTGTGATTTCCTGAGAATCGAACCTTGGTTCCCTAACCCTAATTGATGAGAGGCTCGCTGCTTGATGGT GTGTACAAACTCACCTGAATGGGACTTTTTTAGACAGATCTTCATGACCTGTTCCCACCCCAGTTCATCATCATC TCTTTTACACCAAAAGGTCTGCAGGGTGTGGTAACTGTTTCTTTTGTGCCATTTTGGGGTGGAGAAGGTGGATGT AGCTTCCAGGAGCTCCAGCTATAAGCTTGGAAGTGTCTGTGTGATTGTAATCACATGGTGACAACACTCAGAATC TAAATTGGACTTCTGTTGTATTCTCACCACTCAATTTGTTTTTTAGCAGTTTAATGGGTACATTTTAGAGTCTTC CATTTTGTTGGAATTAGATCCTCCCCTTCAAATGCTGTAATTAACAACACTTAAAAAACTTGAATAAAATATTGA AACCTC

1037/2682 FIGURE 953

MAVPPTYADLGKSARDVFTKGYGFGLIKLDLKTKSENGLEFTSSGSANTETTKVTGSLETKYRWTEYGLIFTEKW NTDNTLGTEITVEDQLARGLKLTFDSSFSPNTGKKNAKIKTGYKREHINLGCDMDFDIAGPSIRGALVLGYEGWL AGYQMNFETAKSRVTQSNFAVGYKTDEFQLHTNVNDGTEFGGSIYQKVNKKLETAVNLAWTAGNSNTRFGIAAKY QIDPDACFSAKVNNSSLIGLGYTQTLKPGIKLTLSALLDGKNVNAGGHKLGLGLEFQA

1038/2682 FIGURE 954A

GCGGGGCCGAGGCCGCCTCCGAGCGCCAGGTTTATTCAGTCACCATGAAGCTGCTGCTGCTGCACCCGGCCTTCC AGAGCTGCCTCCTGCTGACCCTGCTTGGCTTATGGAGAACCACCCCTGAGGCTCACGCTTCATCCCTGGGTGCAC CAGCTATCAGCGCTGCCTCCTTCCTGCAGGATCTAATACATCGGTATGGCGAGGGTGACAGCCTCACTCTGCAGC AGCTGAAGGCCCTGCTCAACCACCTGGATGTGGGAGTGGGCCGGGGTAATGTCACCCAGCACGTGCAAGGACACA GGAACCTCTCCACGTGCTTTAGTTCTGGAGACCTCTTCACTGCCCACAATTTCAGCGAGCAGTCGCGGATTGGGA GCAGCGAGCTCCAGGAGTTCTGCCCCACCATCCTCCAGCAGCTGGATTCCCGGGCCTGCACCTCGGAGAACCAGG AAAACGAGGAGAATGAGCAGACGGAGGAGGGGCGGCCAAGCGCTGTTGAAGTGTGGGGATACGGTCTCCTCTGTG TGACCGTCATCTCCCTCTGCTCCCTCCTGGGGGCCAGCGTGGTGCCCTTCATGAAGAAGACCTTTTACAAGAGGC TGCTGCTCTACTTCATAGCTCTGGCGATTGGAACCCTCTACTCCAACGCCCTCTTCCAGCTCATCCCGGAGGCAT TTGGTTTCAACCCTCTGGAAGATTATTATGTCTCCAAGTCTGCAGTGGTGTTTTGGGGGGCTTTTATCTTTTCTTTT TCACAGAGAAGATCTTGAAGATTCTTCTTAAGCAGAAAAATGAGCATCATCATGGACACAGCCATTATGCCTCTG AGTCGCTTCCCTCCAAGAAGGACCAGGAGGAGGGGGGTGATGGAGAAGCTGCAGAACGGGGACCTGGACCACATGA CTGTGCAGGACCTGCAGGCTTCCCAGAGTGCTTGCTACTGGCTGAAAGGTGTCCGCTACTCTGATATCGGCACTC TGTCAGTTTTCCAAGGCATCAGCACCTCGGTGGCCATCCTCTGTGAGGAGTTCCCACATGAGCTAGGAGACTTTG TGGGTCTGGCCTTTGGCATCCTGGCCGGCAGCCACTTCTCTGCCAACTGGATTTTTGCGCTAGCTGGAGGAATGT TCTTGATTCCATTTATCATCCAGAACCTGGGCCTCCTGACTGGATTCACCATCATGGTGGTCCTCACCATGTATT ${\tt CAGGACAGATCCAGATTGGG} \underline{{\tt TAG}} {\tt GGCTCTGCCAAGAGCCTGTGGGACTGGAAGTCGGGCCCTGGGCTGCCCGATC}$ GCCAGCCGAGGACTTACCATCCACAATGCACCACGGAAGAGGCCGTTCTATGAAAAACTGACACAGACTGTATT CCTGCATTCAAATGTCAGCCGTTTGTAAAATGCTGTATCCTAGGAATAAGCTGCCCTGGTAACCAGTCTCTAGCT AGTGCCTCTTGCCCTCTCCTCACCTCCTTTTCTCTCAGTGACTCTGGAACCTGAATGCAGCTTACAAGACAAGCC TGACTTTTTTCTCTGATTACCTTGGCCTCCTCTTGGAACCAGTGCTGAAAGGTTTTGAATCCTTTACCCAACAAT GCAAAAATAGAGCCAATGGTTATAACTTGGCTAGAAATATCAAGAGTTGAATCCATAGTGTGGGGCCCATGACTC TAGCTGGGCACCTTGGACCTCCAGCTGGCCAATAGAAGAGACAGGAGACAGGAAGCCTTCCCATTTTTTCAAAGT CTGTTTAATTGCCTATTACTTCTCAAAGAGAACCTGAAGTCAGAACACATGAGCAGGGTGAGAGGTGAGGCAA GGTTCATCCTGAATGGGAGGGAAGTCGAACCACTGCTGTGTCTTGTCAGGATGCTCACTTGTTCCTACTGAG ATGCTGGATATTGATTTTGTAACAGCACCTGGTGTTTCACGGCTGTCCGAGTGAGCTAACGTGGCGGTGTGGCTG ${\tt CCTGGACCTCCTCTTCAGGTTAACGCTGACAGAATGGAGGCTCAGGCTGTCTGCAAGAAAACAGTTGGTTTGGC}$ TGTGATTTTGACCTCCTCTTCCCCACTGCCATCTTCTAAGAGACTTTGTAGCTGCCTCCTAGAAGCACATTCTGA GCACATTTGAGACCTCTGTGTTAGAGGGGAGACTGCACAAACTATCCTCCCCCAGGTTGAGACGTCTGCAGAGTG GCAAGCTGACTTGTAGAAATGGGGTGCCATTTATGCTCTACTTAGACAAGGGTAATCAGAAATGGAATCAGTGCA GGCAAAATTTAGGATTTGCCGCTTCCATAAATCAAAGCATGACTAATAGGGGGTCTCTGAAATGTAAGGGCACAA ACTTCACTTAGGGCATCGCAGATGTTTGCAGAATGGTTGGCCTAATGATTATGCTACAGATGGGTTTTAAATGAC CCGTCTAGGTTACTGCTTCCTTGCAAAAAAAGTCGAATCCTGCATTGAATTGAATATGAATTTCTCTAACTCTCT CCAGAAAATGGATGGAGATAACTTGTCTTTAAAACTGTAGGCCAGCCTTAGCCACTGTGGAGCCCTTGCCTCCGA GCTCTGGCTTCAAGGGGAGCTCTTCTCCAGGTTCACTAGGTGAATTGATTATTATTATCATATTGATAATGTGA GATTCTTTAGCCACTTTGGGGAGCCTGTCTCTCCAGAAGCCTTTCTTAGTGGTGCCCACAGTTGGAGCCCAGGGG CCATGTTTGCAAACTGATTCATGTGCATGGCTGACAGGAGTACTGGTTCACTACCAATGCCTGAGCTTTTCTCTT ACATAGAAAACTGTCCACTCTCAGTAATCACAAGCAGCATCCGTTTTGTTTTCTCTTCTTGGGAGACATCTGTC AAACCAGGAATATTCTTGAAAAGAACGTGAGCAGGAAAAACTGCTGGTGATACTTTTTTAAGTTTTTGTTTTTAT CTTGĆCTGTTGGCTTCAATACATTTGAGAATACGCTGAAGAGGGAAAATTTCAGTGATGGAGATTCTAGATTAAA TATCAGGACTGATTTCCTGGTGGGATTATGGTCCAGTTTTACCAAAGAACCAATTCCTTGAATGTTGGAATCTAA CTTTTTATATTGTCATTATTATTGTTGTTTTTAAACGGTTCTTTGTCTTTTCTGTTTTATTTTTCTCAAGCTGCT TTCAGGAGCTAGCAGAAAATAACTCAAAGTTGAAGACTCTGGAAGATTTTGCTTTAACCTAACTCGCATTGATGT

1039/2682 FIGURE 954B

1040/2682 FIGURE 955

RVYADAPAKLLLPPPAAWDLAVRLRGAEAASERQVYSVTMKLLLHPAFQSCLLLTLLGLWRTTPEAHASSLGAP
AISAASFLQDLIHRYGEGDSLTLQQLKALLNHLDVGVGRGNVTQHVQGHRNLSTCFSSGDLFTAHNFSEQSRIGS
SELQEFCPTILQQLDSRACTSENQENEENEQTEEGRPSAVEVWGYGLLCVTVISLCSLLGASVVPFMKKTFYKRL
LLYFIALAIGTLYSNALFQLIPEAFGFNPLEDYYVSKSAVVFGGFYLFFFTEKILKILLKQKNEHHHGHSHYASE
SLPSKKDQEEGVMEKLQNGDLDHMIPQHCSSELDGKAPMVDEKVIVGSLSVQDLQASQSACYWLKGVRYSDIGTL
AWMITLSDGLHNFIDGLAIGASFTVSVFQGISTSVAILCEEFPHELGDFVILLNAGMSIQQALFFNFLSACCCYL
GLAFGILAGSHFSANWIFALAGGMFLYISLADMFPEMNEVCQEDERKGSILIPFIIQNLGLLTGFTIMVVLTMYS
GQIQIG

1041/2682. FIGURE 956A

GCTAAGAGGAGTCCCTGTGTGGGCAGCTGGAGCCTTCAGATTCTCTTCAGGGGAAGAGTCCACATCCCACCTCAT CATGTCCCGAAGAAGCCAGCGCCTCACGCGCTACTCCCAGGGTGACGATGACGGCAGCAGCAGCAGCAGCAGGAGGAG CTCGGTGGCTGGGAGTCAGAGCACCCTGTTTAAAGACAGTCCTCTCAGGACCTTGAAGAGGAAATCCAGCAACAT GAAGCGCCTGTCCCCAGCGCCACAGCTGGGCCCGTCCTCTGATGCACACCCCCCTACTACAGTGAGTCGCTGGT CCACGAGTCCTGGTTCCCACCCAGGAGCTCCCTGGAGGAACTGCATGGTGACGCCAACTGGGGTGAGGACCTGCG GGTGCGGAGGAGGAGGCACGGGTGGCTCAGAGAGCAGCAGGGCCAGCGGGCTTGTGGGGGCGCAAGGCCACCGA GGACTTCCTGGGCTCTTCCTCGGGCTACTCCTCTGAGGACGACTACGTGGGCTACTCGGATGTGGACCAGCAGAG GCTCTTCAGACTTCTCTACTGGTGGGCTGGCACCACCTGGTACCGCCTGACCACACGCTGCCTCCCTTCACGT CTTCGTTTTAACCAGGCGCTTCTCGTCCCTGAAGACGTTCCTCTGGTTCCTGCTGCCGCTGCTCTTGCTGACGTG ${\tt CCTGACGTATGGTGCTTGGTATTTCTACCCCTATGGGCTGCAGACATTCCACCCTGCTTTGGTTTCCTGGTGGGC}$ AGCGAAGGACAGCAGGAGGCCGGATGAGGGCTGGGAAGCCAGAGACTCATCGCCACATTTCCAGGCTGAGCAGCG TGTTATGTCCCGGGTACACTCTCTGGAGCGGCGTCTGGAAGCTCTTGCTGCTGAATTTTCCTCCAACTGGCAGAA GGAGGCCATGCGGCTGGAACGTCTGGAGCTGCGGCAAGGGGCTCCTGGCCAGGGAGGTGGTGGTGGCCTGAGCCA CGAGGACACCCTGGCGCTGCTGGAGGGGCTAGTGAGCCGCCGTGAAGCTGCCCTGAAGGAGGATTTCCGCAGGGA AACTGCTGCTCGCATCCAGGAAGAACTGTCTGCCCTGAGAGCAGAGCATCAGCAAGACTCAGAAGACTCTTCAA GAAGATCGTCCGGGCCTCCCAGGAGTCCGAGGCTCGCATCCAGCAGCTGAAGTCAGAGTGGCAAAGCATGACCCA GGCGGCTCTGGCACTGAAGCAGAGCTCGGTGGCGGAAGAAGTGGGCCTGCTGCCCCAGCAGATCCAGGCCGTGCG CCTTCAGAGAGAGGAGATGCAAGCTCAGCTGCGAGAGCTGGAGAGCAAGATCCTCACCCATGTGGCAGAGATGCA GGAGCAGGTGCACCACATCGTGAAGCAGGCCCTGCAGCGCTACAGTGAGGACCGCATCGGGCTGGCAGACTACGC CCTGGAGTCAGGAGGGGCCAGCGTCATCAGCACCCGATGTTCTGAGACCTACGAGACCAAGACGACCTCCTCAG CTGCTGGGCCTTCCAGGGGCCACAGGGCTTCGCCGTGGTCCGCCTCTCTGCCCGCATCCGCCCCACAGCCGTTAC CTTAGAGCATGTGCCCAAGGCCTTGTCACCCAACAGCACTATCTCCAGTGCCCCCAAGGACTTCGCCATCTTTGG GTTTGACGAAGĂCCTGCAGCAGGAGGGGACACTCCTTGGCAAGTTCACTTACGATCAGGACGGCGAGCCTATTCA GACGTTTCACTTTCAGGCCCCTACGATGGCCACGTACCAGGTGGTGGAGCTGCGGATCCTGACTAACTGGGGCCA TGCCAGCCATCTGGGAGTGGGTGAACAGCACCCCGCCGCTTCCCCCACACGCTTGCTCGGCGCTCTGACTTCTAG GAGCACAAGAGAGGAGCCTGTGGCCCCATGCAGATGAAAAGGACGGGCAGGGTCTCCTGAGCAGCAGGTGGCTCG AGGCGGTTAGCAGGCTCCAGCAGCTCCCTTCTTCCTTCCCTCTGTGCCCGTGGCGTCTGCTTCCCATCCTGGGAG TGTGTATATATGTAGCATATCATGGGGGACTGGGAAGTTGGGAGAGGTAGGACCTGACTGGTCTTGGCTGGGGTC AGGGGCTGGTGCCTGGGAGCTGATGAAGCAGGTGCCAGGGCTGTGGGAGGGGCAAGCTACGGCCTGGGCTAGGTG AGCTGCCTCTGCCCTGGGCAAGGAAGCGAGGCCCTCTGGGAGGAGGGTGCTTAGCTCCAGAGCAGGATGGGACT TCCCCAGGCAGGAAGCACTTGATGGAGAGCTGCCCAGCTCTCCTACAAGGTTAGTGCCCTCCACCTAGGGAAGCC TGAACCACAGGGTCCCTGAGGGCCTTCGACAAAAGTGTGTATTTGTCCCGGGGAGGGTAGCAGTGGGCCATGGGG CTTCTTGTGCCCTAAAGGGGACTGGCTGCTGTGATCTTCTAAGGGGCCCAGGGCCAACCCTGTAGGCTTCCCCTC TGCTGGGGACGGTAGTTGCTTTTCTCTCTCTGATGCTAGGTTGGGGCCCACCCTGCTCCCTGTTCCTGCTAGGG CCTGCCAGTGCCCTGAGCTTGCTTTCCACATTCTCCCAGGGTATGGAGACCTAGACCTGTCTTTGGGGCCATTA GCATCTGGGGTTATAGCAAGAAGAGTGGGGAGCATGGAACTCCTGGGCTCTTGTGGGGACGTTCAGGGTATCGGG GTGCGAGGTCTGTCTGCACCGGCCCCCACATCTAACCAGGCCCTGATGTAGGGGTCGTCCGCTCAGGCTGCCCCC TTGGGCTCTTGCAGCTCTTGTTCAGGTAGTCGCCCTTCTGGTTTGTTCTCTGTGGGGCCAGTTGGTGGGGGCTGGG ATTATGTATATATTTTTCAAGGTCTGTTTTTCTAACTGAAAAGCTAAGGGCTTGATTCCTAGCCCCGTTCTGTGG GGCACTGGGTGATACTCAGTTTCTTGTTCCTGGCCGTGGAGAGGGGCCTGGGGCACTGGTTCCGGCTGTGTCTGG TGGTCCGGCTGCAGGGAAGGGGCAAGAAGGCGGGCAGGCCTTCACTGCAGCACTGAGCCTCAAATCCGCTCTGGA

1042/2682 FIGURE 956B

1043/2682 FIGURE 957A

GTAAGATTTTTAAACCAAGGAATGACTGGGCTATCTATAAACCCAGATGCACTAAGTGGGGAGAAAAGCTCGGAG CTGCAGCATATCAGCTTTGTCAACCTGCCAACAGCAGAGCGTACCATGCTGCAAGGAGTAATAAACAAGGAATTA GAAAACTCGCTGCTGGAGAACAGTCAAATTAAACACCTTTTTGAAAGGATGAGCATGTATATATTGCAGTTCTAT TAAATGTAGCTTCTTAGTGAGGTTGGCATTATGTTAAGGCTGGTATGGAAGAGAACTGATGAAGCAGGAGTGGTĊ TGGTGACATTTTTCTGACTTGATTGGCTGGGGCGTGTGATGTAATAGGTTTCAGTGCAGCCCCTTATAGGTTTTA AAATGAATTCCAAGACACCATTACAAAGAAAGCCGGACTCTTTTCTTATAACTGAGCTCAGCCAAGGAAACTCTT GCACAA**ATG**TACAATACTGTTTGGAATATGGAAGACCTGGATTTAGAATATGCCAAGACAGATATAAATTGTGGC ACAGACTTGATGTTTTATATAGAAATGGACCCACCAGCACTGCCTCCTAAACCACCAAAACCTACTACTGTAGCC AACAACGGTATGAATAACAATATATCCTTACAAGATGCTGAATGGTACTGGGGAGATATCTCGAGGGAAGAAGTG AATGAAAAACTTCGAGATACAGCAGACGGGACCTTTTTGGTACGAGATGCGTCTACTAAAATGCATGGTGATTAT ACTCTTACACTAAGGAAAGGGGGAAATAACAAATTAATCAAAATATTTCATCGAGATGGGAAATATGGCTTCTCT AAATTGGATGTGAAATTACTTTATCCAGTATCCAAATACCAACAGGATCAAGTTGTCAAAGAAGATAATATTGAA GCTGTAGGGAAAAATTACATGAATATAACACTCAGTTTCAAGAAAAAGTCGAGAATATGATAGATTATATGAA GAATATACCCGCACATCCCAGGAAATCCAAATGAAAAGGACAGCTATTGAAGCATTTAATGAAACCATAAAAATA TTTGAAGAACAGTGCCAGACCCAAGAGCGGTACAGCAAAGAATACATAGAAAAGTTTAAACGTGAAGGCAATGAG **AAAGAAATACAAAGGATTATGCATAATTATGATAAGTTGAAGTCTCGAATCAGTGAAATTATTGACAGTAGAAGA** AGATTGGAAGAAGACTTGAAGAAGCAGGCAGCTGAGTATCGAGAAATTGACAAACGTATGAACAGCATTAAACCA GACCTTATCCAGCTGAGAAAGACGAGAGACCAATACTTGATGTGGTTGACTCAAAAAAGGTGTTCGGCAAAAAGAAG TTGAACGAGTGGTTGGGCAATGAAAACACTGAAGACCAATATTCACTGGTGGAAGATGATGAAGATTTGCCCCAT CATGATGAGAAGACATGGAATGTTGGAAGCAGCAACCGAAACAAAGCTGAAAACCTGTTGCGAGGGAAGCGAGAT GGCACTTTTCTTGTCCGGGAGAGCAGTAAACAGGGCTGCTATGCCTGCTCTGTAGTGGTGGACGGCGAAGTAAAG CATTGTGTCATAAACAAAACAGCAACTGGCTATGGCTTTGCCGAGCCCTATAACTTGTACAGCTCTCTGAAAGAA CTGGTGCTACATTACCAACACCCCCCTTGTGCAGCACAACGACTCCCTCAATGTCACACTAGCCTACCCAGTA AGAGCTTTCTTTCACAAAAAAGAAGTAGGGGAAGACATGCAGCCTAAGGCTGTATGATGACCACACGTTCCTAAG CTGGAGTGCTTATCCCTTCTTTTTCTTTTTCTTTGGTTTAATTTAAAGCCACAACCACATACAACACAAAAGAG AAAAAGAAATGCAAAAATCTCTGCGTGCAGGGACAAAGAGGCCTTTAACCATGGTGCTTGTTAATGCTTTCTGAA GGTCCAGCCTGGTTTAGCCTGGATGTTGCTGTGCACGGTGGACCCAGACACCTCGCACTGTGGATTATTTCATTT TGTAACAAATGAACGATATGTAGCAGAAAGGCACGTCCACTCACAAGGGACGCTTTGGGAGAATGTCAGTTCATG TATGTTCAGAAGAAATTCTGTCATAGAAAGTGCCAGAAAGTGTTTAACTTGTCAAAAAAACAAAAACCCAGCAACA <u>GAAAAATGGAGTTTGGAAAACAGGACTTAAAATGACATTCAGTATATAAAATATGTACATAATATTGGATGACTA</u> ACTATCAAATAGATGGATTTGTATCAATACCAAATAGCTTCTGTTTTGTTTTTGCTGAAGGCTAAATTCACAGCGC TATGCAATTCTTAATTTTCATTAAGTTGTTATTTCAGTTTTAAATGTACCTTCAGAATAAGCTTCCCCACCCCAG TTTTTGTTGCTTGAAAATATTGTTGTCCCGGATTTTTGTTAATATTCATTTTTGTTATCCTTTTTTAAAAGTAAA TGTACAGGATGCCAGTAAAAAAAAAAAAAATGGCTTCAGAATTAAAACTATGAAATATTTTACAGTTTTTCTTGTA CTGATAAGCTTCAAAGCTGCTTTATTCAATAAAAAAAAGAAATGAAAAAGATATATGAATATGACAAAGTATTGC TGAGTCCAACAATGTTGTTTTAAGACTCTTAAAATACGGTACCTGGCAATGTTTATTTCATAAAGAATTGTGAAC TTCTTGAATCTAGGGAGGGGAATGTAGTGAAGGGATGTATCAAGTGGGGTGGTGGGAGGGGAGGCAAGGTTAT ATGCACTTTCTCATGATTTACAGAGAAGTGAATAACTGCAAAGTGAAGTTGCTTCTTCTACTTCAGTCTTCTCTC ACTITGATTTGCTAGTTGTTATCAATTAATGACAATTACAAACCTACTGTATCTCTAATACAGTGTGACTGGTCA GGTATTTCAGTTCTTAGGAAGGAAGTGCCAAGTTTGTTTTTGGGTTCCTGGAACAGCGCTCACCTTTGTTTAGAA CACTGGTTTAAAGGGATAATCATCTCTGTCACATTAGACTATCCATCATGACCAGCAAATACTCATTTTAGGAAA AAAAAAGCATGATCTGAAAAATACTTTTGGTGGTATGTTGGTTACCCTCCTAGCTTTCCATTTGGTTTAGAACA TAAAGCAAATAGACACAGTCATACTGTCACTGCTCTGGACTGTGTGGAGCTCGCTAAAGTCATGGTCATTGCAGG

1044/2682 FIGURE 957B

AATCCAAGTGGCAGTCCTTCTCATTCATTCTAATCATTGTATGTGCTTCACTACGGGGGGGAGAAGGAAACGTTA GCATCATGTTTCCCATTTAGGGCAGGAGTGAGAGGTCTCTTCCTGATTTAGATATGCAAAAGCTGGTATGTTC AGTAGGAACTGTACATGTGTTGGGAGGCATAAAGACTAATTAGCAACCATAATATGGTCACTACCCTAATAGACT AAATGAAATCTTGCAATTTCAAATTACTCTTTCTCCATATTAGATTTACCCACAGCTATATTTCTGTTTAAGTAC TAGGGTGAGGGTTTTCTGTTACTTTGTTTTTTAATGTTGTTCCTTTTGAAAGAATCAGTCTTGCAGCTGAGTGAA GACTGTTAGCCCTCAAACTTGACTCTACTGATCTGACCATTTCCCTCTCATCGCCAGACAACTGACGATTTCCCT GGTTTTAGTCTGCGTCTCTGCTTTAAAGTTATTGTGATATCCTTCTAGATCATACACAAGTCTAACAGTTAATTA TCTAAAATATAAGATCTGAGATTGAATATTTTCATTAAAAGCTACAGTTTTGTGAATCTTTGTGCTTCAACATTC TTTGCAAGATGATACGGTATTTAGGCATTTGCCTTATTTTTGCATCTCACAAACATAAGTGCAATAGATCTTTTC ATTGAACAGCAAAGTAGGATTCATCCATATGACTTGAGTTACACCAGACCTGTTCTGCCCAATGCCTTTTT GATTACAGTGTAGCTTGCCCACCGCATTTGTCGTTTTAGATACTTTGCTAGCCGGCCACTTTGGATTTCATCAGA CAGTCCTAACAATATTGTCTGAACGGCTGAATATGAATAGATACAGCAGAGGCACTCCTGATATATGATTTTTAT CCATGCGTCAGTTTTTCCCACCCAGTGTAGCATCCTAAAGATAAAGCCAGAAGCTAAGCTGCAGTGAGGCTGTGA GCATGTGTTTGCAACATCTGATAACTTCATGGCCTTTGATAAATGTATATATGTATATGTGCATGGACTGTGTTT CCAGTACACCTTTCAGCCAAAACAGATCCACAGTAGTTGTTGAGTTCAAGTACATAAAGTACATAACAAGCGAAC GTCTAGTACAATTCTTACTTATGTGTATGGGATTTTTCCCTTTGAGGTTGCTTTGTTTTGTCTTACAAAGGTGAA **AATTGTTTGTAAGTGAAGTGAGAAGTTCATATTTCTTTGGCTTTTTTGTGTTTTTAAAAGTTACTCCTTTTAGGG** AGCTGGTCTGATGACTTGCTTAGCTTGGAAATCCTTGTTTTCAGTGTGTCGAGTCAAAATGTGTTTATGTGAGCT GTCACTGTGGGGAACCAATTGCTTTGTCATATAGCTGGTTATGAACTAGTAACATGTTTGGGAAGTCCTACTGAT TGCAGACACTGAGATCTGTTTGAGTTTAGGGTCATTTTTAGAAAGGGGCAGTTTAAAGCACAATGTCTCACATGG GGAAATAGAATTGAGTCAATTGGAAAGACTATCCAACTTAACATGAAACTTGTCACCATGAGATAGCATTAGCTG CCCAGGATGCTGCTATATATATATATATATT

1045/2682 FIGURE 958

MYNTVWNMEDLDLEYAKTDINCGTDLMFYIEMDPPALPPKPTKVANNGMNNNISLQDAEWYWGDISREEVNE KLRDTADGTFLVRDASTKMHGDYTLTLRKGGNNKLIKIFHRDGKYGFSDPLTFSSVVELINHYRNESLAQYNPKL DVKLLYPVSKYQQDQVVKEDNIEAVGKKLHEYNTQFQEKSREYDRLYEEYTRTSQEIQMKRTAIEAFNETIKIFE EQCQTQERYSKEYIEKFKREGNEKEIQRIMHNYDKLKSRISEIIDSRRRLEEDLKKQAAEYREIDKRMNSIKPDL IQLRKTRDQYLMWLTQKGVRQKKLNEWLGNENTEDQYSLVEDDEDLPHHDEKTWNVGSSNRNKAENLLRGKRDGT FLVRESSKQGCYACSVVVDGEVKHCVINKTATGYGFAEPYNLYSSLKELVLHYQHTSLVQHNDSLNVTLAYPVYA QQRR

1046/2682 FIGURE 959

 ${\tt GACCGAAGCAAGAGCTGGTTCAGGTGGCAGCCACAGCAGCCTCAGGGACCTCAGCAACT} \underline{{\tt ATG}} {\tt GCCTCCTGCCCAG}$ ACTCTGATAATAGCTGGGTGCTTGCTGGCTCCGAGAGCCTGCCAGTGGAGACACTGGGCCCGGCATCCAGGATGG ACCCAGAATCTGAGAGAGCCCTGCAGGCCCCTCACAGCCCCTCCAAGACAGATGGGAAAGAATTAGCTGGGACCA TGGATGGAGAAGGGACGCTCTTCCAGACTGAAAGCCCTCAGTCTGGCAGCATTCTAACAGAGGAGACTGAGGTCA AGGGCACCCTGGAAGGTGATGTTTGTGGTGTGGAGCCTCCTGGCCCAGGAGACACAGTAGTCCAGGGAGACCTGC AGGAGACCACCGTGGTGACAGGCCTGGGACCAGACACACAGGACCTGGAAGGCCAGAGCCCTCCACAGAGCCTGC CTTCAACCCCAAAGCAGCTTGGATCAGGGAGGAGGGCCGCTGCTCCAGCAGTGACGATGACACCGACGTGGACA AGGCTGGGGGTGAGGCTGAGCCGGGGAGCTGGGCATCTCCCTCAACATGTGCCTCCTTGGGGCCCTGGTTCTGC TTGGCCTGGGGGTCCTCCTCTCTCAGGTGGCCTCTCAGAGTCTGAGACTGGGCCCATGGAGGAAGTGGAGCGGC CAGTGCCTCCTGACAGTGTCCCCAGCCTGCAAAACATGGGTCTTCTGCTGGACAAGCTGGCCAAGGAGAACCAGG ACATCCGGCTGCTGCAGGCCCAGCTGCAGGCCCAAAAGGAAGAGCTTCAGAGCCTGATGCACCAGCCCAAAGGGC TAGAGGAGGAGAATGCCCAGCTCCGGGGGGCTCTGCAGCAGGGCGAAGCCTTCCAGCGGGCTCTGGAGTCAGAGC TGCAGCAGCTGCGGGCCCGGCTCCAGGGGCTGGAGGCCGACTGTGTCCGGGGCCCAGATGGGGTGTGCCTCAGTG GGGGTAGAGGCCCACAGGGTGACAAGGCCATCAGGGAGCAAGGCCCCAGGGAGCAGGAGCCAGAACTCAGCTTCC TGAAGCAGAAGGAACAGCTGGAGGCTGAGGCACAGGCATTAAGGCAAGAGTTAGAGAGGCAGCGACGGCTGCTGG GGTCTGTACAGCAGGATCTGGAGAGGAGCTTGCAGGATGCCAGCCGGGGGACCCAGCTCATGCTTGGCTTGGCTG AGCTGGGCCACAGATTGGCCCAGAAACTGCAGGGCCTGGAGAACTGGGGCCAGGACCCTGGGGTCTCTGCCAATG CCTCAAAGGCCTGGCACCAGAAGTCCCACTTCCAGAATTCTAGGGAGTGGAGTGGAAAGGAAAAGTGGTGGGATG GAGGTCAGGAGGACAGGGAGCCAGCAGGAAGGTGGAAGGAGGCCAAGGGTGGAGGAGTCGGGGAGCAAGA AGGAGGGCAAGCGACAGGGCCCGAAGGAACCCCCAAGGAAAAGTGGTAGCTTCCACTCCTCTGGAGAAAAGCAGA AGCAACCTCGGTGGAGGGAAGGGACTAAGGACAGCCATGACCCCTGCCATCCTGGGCAGAGCTGTTGAGGCCCA AGCTAGCCCCAGTGCGGCAACAGGAGCTGGCCTCTCTGCTAAGAACATACTTGGCACGGCTGCCCTGGGCTGGGC AGCTGACCAAGGAGCTACCCCTCTCACCTGCTTTCTTTGGTGAGGATGGCATCTTCCGTCATGACCGCCTCCGCT TAGATGACTTTGAGGACTTCATCTTCAGCCACTTCTTTGGAGACAAGCACTGAAGAAGAGGTCAGGGAAGAAGA GCTGACACCCTGCCCCACAGGGAATGGCCTTGGCCTGGCCCAAGATCCCAGCGTTATCTAACTCCTGGAG GGTGGACTCTGTCCTGGCTTGTTTGGTGTCCTCAGATATCTTTCACACAGTAGAGCAAAATCACCAGCCCTGCAC GGCCCTGGGATGTGGGCTTGTGTTTTGTCACTGTGAAGGGGGAGATGGGAGAGGAGCCTGTTTTGGGGTGGGGTC TGGGGAAGGCAATCTGATTCTGAAGCTAAAGAGCTTTCATCCTCTTGAGTGTATGTCCCCATAGTGGGCCCCTTG ACCCACATGCTGACCGGTGCCTTGGGATTTGACTAGAGTTGCTGGCTCGAGGCCCAGCACGAGGACTTACCCTGG CCACGGCTTCACCTCCCTATGTGAACTGTAGACTCAGATCCCAATAAAGTGCTGTTGCAGCTATGATGCTAGGTG CTTGTTCTGTATCCCCCTTTGCCCTTGCCCTTGCCCTTCCAACAAACCCTAGGCCCTTGAGAAGCTGATACTTCTC CTTTTGCTCACAGCTGCCTTGGCCCCACCCCTGGGAGATGTAGCAAATTGAGTGTGGGTTTTGGAGTCTGAGCCT CAGGCTCAAATCCAGGCCAAGTGATCTTGGGCAAGTTAATCTCTGGGAACTTTGGGTTTCTTATCCTCAAAAAAG

1047/2682 FIGURE 960

MASCPDSDNSWVLAGSESLPVETLGPASRMDPESERALQAPHSPSKTDGKELAGTMDGEGTLFQTESPQSGSILT EETEVKGTLEGDVCGVEPPGPGDTVVQGDLQETTVVTGLGPDTQDLEGQSPPQSLPSTPKAAWIREEGRCSSSDD DTDVDMEGLRRRRGREAGPPQPMVPLAVENQAGGEGAGGELGISLNMCLLGALVLLGLGVLLFSGGLSESETGPM EEVERQVLPDPEVLEAVGDRQDGLREQLQAPVPPDSVPSLQNMGLLLDKLAKENQDIRLLQAQLQAQKEELQSLM HQPKGLEEENAQLRGALQQGEAFQRALESELQQLRARLQGLEADCVRGPDGVCLSGGRGPQGDKAIREQGPREQE PELSFLKQKEQLEAEAQALRQELERQRRLLGSVQQDLERSLQDASRGDPAHAGLAELGHRLAQKLQGLENWGQDP GVSANASKAWHQKSHFQNSREWSGKEKWWDGQRDRKAEHWKHKKEESGRERKKNWGGQEDREPAGRWKEGRPRVE ESGSKKEGKRQGPKEPPRKSGSFHSSGEKQKQPRWREGTKDSHDPLPSWAELLRPKYRAPQGCSGVDECARQEGL TFFGTELAPVRQQELASLLRTYLARLPWAGQLTKELPLSPAFFGEDGIFRHDRLRFRDFVDALEDSLEEVAVQQT GDDDEVDDFEDFIFSHFFGDKALKKRSGKKDKHSQSPRAAGPREGHSHSHHHHHRG

1048/2682 FIGURE 961

CTCTTCTCACATCAGCGGGTCCAGGCCCAACCGACAGACTATGGGGGGCTCCTTCACCAGGCGCTGCGTGGAGTGG CTGCTGGGCCTCTACTTCCTCAGCCACATCCCCATCACCCTGTTCATGGACCTGCAGGCGGTCGTGCCGCGCGAG CTCTACCCAGTCGAGTTTAGAAACCTGCTGAAGTGGTATGCTAAGGAGTTCAAAGACCCACTGCTACAGGAGCCC TTCCTCAAAGGAAGCTGCAAGTGGATTCGAACTCCTGCAATCATCTACTCTGTTCACACCATGACAACCTTAATT CTGATACTCTCCACATTTCTGTTTGAGGATTTCTCCAAAGCCAGTGGTTTCAAGGGACAAAGACCTGAGACTTTG GCCTACAGGGTGGTTGCTTGTTGGATACATACAGGAACACTGCTCAGAACCCACGTCTTCAGCAGCATTTGAAAC TTTTTGAGACAGTCTCACTCTGTTGCCAGGCTGGAGTAAAGGGCAGTGGCATGATCTCGGCTCACTGCAACCTCC GCCTCCTGGGCTCAAGCCATCTTCCTTAGCCTCCCAAGTAGCTAGAACTACAGGTGTGTACCAACACGTATGGCT AATTTGTTTTTTTTTTTTTTTTTGTGTGTGGAGACAGGGTTTTGCCATGTTGCCCAGGTTGGTCTCGAACGCCTAGG CTCAAGTGATCTGCCCACCTCAGTCTCCCTAAGTGCTGGGATTACAGACGTGAACCACTGGGCCCAGACCCAAACC TTCACCTTCTAAGGGCACTGGGATGAACAGACCGATCGGCTTGAGGGTGGGCAAAGGGGTGTGGGCTAGGTTATA AGGAAGTGGTACCAAATAACTGTGTTGCCTGAGTTCCACCGCAAGATTACTAAAAGCAGGACCAGACCAGAAACT GCTAAAGAACATGGCCTGTTTGACATGTTCATGAGTCACCTGACCCACAGCATATATGCTTATGACTAAACCCTC CACTCCTGATTCTCAAGAGTGTATCACCTGTCAGCAAAATGAATAGTGGGATATTTTTGGGCCATTTTAAATGTGA AATTTTGCCTCTTTAATGTTAATTCAAAACTATATCAATGTTTTCTTGTTCCCACCTCTAACCCAAGGAAAAAAG AGAAAACATACTATGCAAAGGAAGTTTAAACTTAAGTTTTCCTTAAGGGTCAGCCCAACAATGACTTTCAGTCAA GCTTTTAÅATTAGTTTATTTCTAAATCTTAGTCTTCCACATTTCTAGAGGCCACCTGACACAAGTCCCTGTATCT GAAGTCTAGCATCTCAAGGCTGATCTGGAAGTGTGCTAGTATGCTCCCTAGTGGATAACTTAATCTTTTAATACA GTTCCGTCATTCCCATCTTGTTTTCAGAAGAGAAGGTGGCTACAGCCAGGCATAACTTATCCACTGTGTGCATAG AGGGTCTCTTCACGTTGATGCTTTGGCATTCCATCAGCTTTCTCTAAGTCTTTGCTCAAGTTCAAGGTTAAAATGA TGTTAGACAACAGGTCCCAGTCAGTCCCCTCTATTTTCACCCATTTTGCTCACAAGCCATATTGGCCCGATTAGT GGTACTGTCTGACTCACGTGTGTGATCCAAATAAAGGTAGCTGCCGGGAATT

1049/2682 FIGURE 962

GGCTTACAGGAGGCCACCTCTGCAGTTGGGAGGGGCACCGTCCGGAGGAGACCAGGCCTCTACACACCCCCCACT AGTGATAGATGCATTTTCCCCAGGCTGTCTCAGAAAGGTCGCTAAATGTATACTGTTGTCAGAATTGCTGAGATC ACCTGGTCCCTTGTGCTGACTCTAGCACAGTGGCCAGGATCCAATACGAGTCCAGGGGTGACCGCAGGATGGTGG GGGCAGCGGGCTTCTCCACCTACCCCAGCCACCAAGGCCCTGACGCACTGCCTCCTGCACCTTCAGCACATCCCT GTGCACAGCTGGAAGGGTGCATGGCCCGCTCACCTTTGTTCAGATGGGTGGAAACGCTGATGATACCAGCTCCTC CCTGCCGTGCCCTGCCACGGAGCAGGCATTGTGAACTGGCTGTTTTGCAGTCCCACGTGGCATGGCCTCCAG CCCAACCCACAGTGGAGACTGGAGACAGGGCAATGAGTCTGGTCGGGGGCACGTGGACATGCCCCATAGGGGCCC TCTGTTGGCAGCCAAGAACCCACACCATGAAGACAGGGAGTGAGGGGCCTTTGTGCCCAACTCCAGCACAGCTGC GTTCTGGGGTGTGTGAGAGGCATGTTCGTGTCTGTGCGCTGGTGGTCTCGTGAGACAGTTCCGAGGACGGGGAAA TTGCAGGGTGGTGGGGGCGTGAGGCTTATATGTGGAACTGATGCAGAGTTCGCCTGCAGACGGATCTGGATATAC ACTATGTATAATTGTTACGTGTAATTTAAAATATATCTGTTTGCCATCGTCATGAGAAGATTATATGTAAGGCTC TGAAGGGAGAGGGAGATGTACATTCTGCCAGGCTCCTGGGGACCTTATCCGAGTCATGAAATTGATGACTGTTGA TCCAGTGGTGCAAGAAGCTACACTCCATGTGTCATCACGCTTA<u>TGA</u>CTCCTAATGTATTTTTAAGGCAAAAAATG TCAGCCGACTCCATCTTCACCCCTCGATTCCTCGAGTCCAGCCTTTCTGTGCCAGTGCTTCACTGAGCCACAACG CTCTCGCCATCGGGACCCGGCTGGGCCTGGAGTCTCGGGGCACAGTTGCCATGGAGCCCTCCTGGGTCATTCTAC AAATGTGCTGAGTGCCAGCTGAAAACCCCACAGGAGATGGAGTACCTTGGCCAAGCTTAAAGAGAAGATTTTCTC AGGGTATTTATTAGTGTGTCCAGCAGGGTCAGGAAGCAGGATGGAAAGATGCATTCAGACTGTTAATTTATTAAC AAGGCAAATGATTTTGTGTTTCTTGATGACAGACTATTAAGTTTGGGACTTATTTTCCCATTTGAGAAGTTATAA TATATATTTAAGATGATAAGTTTCCTGCTTAAGTTGTGCCTTTCAGCTTCAATGAGTTTAAGGAGCACTAAGGGT AATGATACCAATGAGGGTTGGTTTATTATCAAACCTGAATAGCTGTGGTTTCTCCAGTAAATATTTTCTTCTACT CTATTTTCTAATAGTTTCTTTAGTTTCTTAAAGTTGTGATACTAGATTTAGATTCTGATGCTAACTGCAAAT CAAAAAATGTGAAACTGCCCTGCCTCCCTTTTTGCTGACAACACTGTGTACATTGACCACTTCCTACCATACTT TATGTTGTAAAATCAAACTCTTTTGTGGTACATTATCTCATGCTTCTGCAAATTCGAATAAATTCTATGGCTTCC AAAAAAAAAAAA

1050/2682 FIGURE 963

MKLMTVDPVVQEATLHVSSRL

1051/2682 FIGURE 964

 ${\tt AACAAATTGAAGGTTAACACCTTAAGAGTTGTAGTTACTGACCAGAAAT \underline{ATG}{\tt GACAGACTTCTTAGACTTGGAGGGAAAT \underline{ATG}{\tt GACAGACTTCTTAGACTTGGAGGAAAT \underline{ATG}{\tt GACAGACTTCTTAGACTTGGAGGAGAAT \underline{ATG}{\tt GACAGACTTCTTAGACTTGGAGGAGAAT \underline{ATG}{\tt GACAGACTTCTTAGACTTGGAGGAGAAT \underline{ATG}{\tt GACAGACTTCTTAGACTGGAGAAT \underline{ATG}{\tt GACAGACTTCTTAGACTTGGAGAGAAT \underline{ATG}{\tt GACAGACTTCTTAGACTGGAGAAT \underline{ATG}{\tt GACAGACTTCTTAGACTGGAGAAT \underline{ATG}{\tt GACAGACTTCTTAGACTGGAGAAT \underline{ATG}{\tt GACAGACTTCTTAGACTGGAGAAT \underline{ATG}{\tt GACAGACTTCTTAGACTGGAGAAT \underline{ATG}{\tt GACAGACTTCTAGACTGGAGAAT \underline{ATG}{\tt GACAGACTTCTAGACTGGAGAAT \underline{ATG}{\tt GACAGACTTCTAGACTGGAGAAT \underline{ATG}{\tt GACAGACTTCTAGACTGGAGAT \underline{ATG}{\tt GACAGACTTCTAGACTGGAGAT \underline{ATG}{\tt GACAGACTTCTAGACTGGAGAT \underline{ATG}{\tt GACAGACTGGAGACTGGAGAAT \underline{ATG}{\tt GACAGACTGGAGACTGGAGAAT \underline{ATG}{\tt GACAGACTGGAGACTGGAGAAT \underline{ATG}{\tt GACAGACTGGAGACTGGAGAAT \underline{ATG}{\tt GACAGACTGGAGAAT \underline{ATG}{\tt GACAGACTGGAGACTGGAGAAT \underline{ATG}{\tt GACAGACTGGAGACTGGAGAAT \underline{ATG}{\tt GACAGACTGGAGAAT \underline{ATG}{\tt GACAGACTGGAGAAT \underline{ATG}{\tt GACAGACTGGAGAAT \underline{ATG}{\tt GACAGACTGGAGAAT \underline{ATG}{\tt GACAGACTGGAGAAT \underline{ATG}{\tt GACAGACAGACTGGAGAAT \underline{ATG}{\tt GACAGACAGACTGGAGAAT \underline{ATG}{\tt GACAGACTGGAGAAT \underline{ATG}{\tt GACAGACTGGAGAAT \underline{ATG}{\tt GACAGACAGACTGGAGAAT \underline{ATG}{\tt GACAGACTGGAGACTGGAGAAT \underline{ATG}{\tt GACAGACTGGAGAAT \underline{ATG}{\tt GACAGACTGGAGAAT \underline{ATG}{\tt GACAGACTGGAGACTGGAGAAT \underline{ATG}{\tt GACAGACTGGAGAGATGGAGAAT \underline{ATG}{\tt GACAGACTGGAGACTGGAGAGATGGAGAAT \underline{ATG}{\tt GACAGACTGGAGATGGAGATGGAGATGGAGATGGAGATGGAGATGGAGATGGAGATGGAGATGGAGATGGAGATGGAGATGGAGATGGAGATGGAGATG$ AGGTATGCCTGGACTGGGCCAGGGGCCACCTACAGATGCTCCTGCAGTGGACACAGCAGAACAAGTCTATATCTC TTCCCTGGCACTGTTAAAAATGTTAAAACATGGCCGTGCTGGAGTTCCAATGGAAGTTATGGGTTTGATGCTTGG AGAATTTGTTGATGATTATACCGTCAGAGTGATTGATGTGTTTGCTATGCCACAGTCAGGAACAGGTGTCAGTGT GGAGGCAGTTGATCCAGTGTTCCAAGCTAAAATGTTGGATATGTTGAAGCAGACAGGAAGGCCGGAGATGGTTGT TGGTTGGTATCACAGTCACCCTGGCTTTGGTTGTTGGCTTTCTGGTGTGGATATCAACACTCAGCAGAGCTTTGA AGCCTTGTCGGAGAGAGCTGTGGCAGTGGTTGTGGATCCCATTCAGAGTGTAAAAGGAAAGGTTGTTATTGATGC $\tt CTTCAGATTGATCAATGCTAATATGATGGTCTTAGGACATGAACCAAGACAACAACTTCGAATCTGGGTCACTT$ AAACAAGCCATCTATCCAGGCATTAATTCATGGACTAAACAGACATTATTACTCCATTACTATTAACTATCGGAA CAGTGAACATTGTAAACACAATGAATCAGTGGTAAAAGAGATGTTGGAATTAGCCAAGAATTACAATAAGGCTGT AGAAGAAGAAGATAAGATGACACCTGAACAGCTGGCAATAAAGAATGTTGGCAAGCAGGACCCCAAACGTCATTT GGAGGAACATGTGGATGTACTTATGACCTCAAATATTGTCCAGTGTTTAGCAGCTATGTTGGATACTGTCGTATT TAAATAA

1052/2682 FIGURE 965

MDRLLRLGGGMPGLGQGPPTDAPAVDTAEQVYISSLALLKMLKHGRAGVPMEVMGLMLGEFVDDYTVRVIDVFAM PQSGTGVSVEAVDPVFQAKMLDMLKQTGRPEMVVGWYHSHPGFGCWLSGVDINTQQSFEALSERAVAVVVDPIQS VKGKVVIDAFRLINANMMVLGHEPRQTTSNLGHLNKPSIQALIHGLNRHYYSITINYRKNELEQKMLLNLHKKSW MEGLTLQDYSEHCKHNESVVKEMLELAKNYNKAVEEEDKMTPEQLAIKNVGKQDPKRHLEEHVDVLMTSNIVQCL AAMLDTVVFK

1053/2682 FIGURE 966

AAGGCAACAGACTCTTTATTTAATGTGGTTTAAAATACATCAAAATCAAGTCCCTGGCTGTTGTGAATACCCAAA GGAGACAAAAAAGCTGCCAGTGCAGCTTCAAACAAGTCTGAGTGGCCGGGCTGGGCCATAAGGAAAGCAGTTACA GGGACAGAAGGCAGCTCCCTTCCCCCAGGAAGGGCAAGAGAGCAGGTGCCTGGCTGTCCCTGGGGTGACCACCT CTGTGCTGTGCAAGGCGGAAAGGCTGGGGCAGCAGCTGGAGAATCAGCTCAGCAGGCCTTGGCCCTCCCCCGTGG ACACCAGGCAGCTCCACTGGCCTCCGGGTCAGCCCTCAGGGCCACCGTGATGGGGTGGAGGAGGGGTTAAATAACC ATCTTTACAGAAATAACAGTCTCCTACAGAAAGTGCCTGAGCTCAGCCCATGGTCCGATAACCTCATGGAAAACA AACAACAAATAAAAAAAAAAAGTGCTGCTGACACCTCTCAGAATCTGGTGGACATGAAGCTCTCAGCTGGACAAG GCCCTGAAAACAATTTACTATTAGCAGAGCCATGCGCTCTTGAGCTTCACCTGCTGTGGTCCCCTGGAGGAAAAG AAGACACTGGCCTTCACTCATGGATAGGCACCTCCCCTGCATCTGGCCCAGGACCTGGGCTACTTTGGAAAGCAG CTCAAATCAGACAGAGAAATGCTCAAGTCACTTCTGCCAACTCACTGTGATGGCAGCTACAGATGACAGCCCCTC TCAAGACTCTTCAGCTCACAGACAAGCCACTGACTTCATCTGTACACACCCCCATCCCCAATGCAAGCCCACTGT ACACTTACAGGTATAAATGCATTTGCAAGGCCTTGCAAAATGCCCTATGTACGTAAAACTGACCCACAAAATCCA AAATTGCAAGTGCCAGATGCCAGGCCAGGTCAGAACATCCTGGCTTCAGCAATGGGCTGCTCAGCATGGGAGCCTT TTATGGGCCAGGCCTGGCTGGCCGCTCCCTTCCCAGCATGACCCAACACCAGGCTCTCTAGGCCCTGGCGG AGGTGGGCTCTTGAGGCCCAGTCTGGCCTGATGCTTCTGTGCTCGGTGCTCCTGGGTAGCAAGGCGCTTCTGTGA CCCTGGGGGAGCTGGGTGCTTGAGCCCCAGGCCCCTCTGGCCTCCTCTCAGGGCCACTGTCAGTGAGGGAGCCCT CCAGCCGTTGGATTTTTACCTGCAGGCCCTCCAGTTCTTTATCCCGGACTGTTTTCTCCTCAGCCATCTCAAGCA GGGCCTTGTTGCTGCTCTCCCACCGGGACCGGTACATGGTGGTTTTCTTCTCCAGCTTCTTGATCTTCTTAGTCA TCTTTTCCATCTCCTGCTTGAATGTGGTGAATACCTCGCTGCTTTTGGAAAGTGTGTTCTGGAACTCCTCAAACT TCTCTGTGTATAGGGCAAGCTGTTGCTTCAGGTGGGTCTCTTGCTGCTTCATCAGCTCACACATCCTCTGGGACT CTACTGCCTCTTTCAGGAGAAAATCCTTCTCCCGCTGGTGCCGCTCTTCTGCCTCCTTTAGCATCTCCTGGGCCT GCTGGAGCTTGGCATCCACCAGCTGCTGTTGTAGGTCCTTGTGTTTGAAGACTTTGTCGATATGCTCCTCGCGCA CATTGTGCTGTTCCATCCGGACGCGTGGGTCGAGGTCGAGGGATC

1054/2682 FIGURE 967

GGAGGAGGAGCAAGCGAGGGGGGTTCCTGAGCTTCGCAATTCCTGTGTCGCCTTCTGGGCTCCCAGCCTGC CCGCAGCCACCTCTCCCGACCTGTGATACAAAAGATCTTCCGGGGGGCTGCACCTGCCTTTGCCTAAGG $\tt CGGATTTGAATCTCTTTCTCCCTTCAGAATCTTATCTTGGCTTTGGATCTTAGAAGAGAATCACTAACCAGAG$ AGCAACCGGGAGCTGGTGGTTGACTTTCTCTCCTACAAGCTTTCCCAGAAAGGATACAGCTGGAGTCAGTTTAGT GATGTGGAAGAGAACAGGACTGAGGCCCCAGAAGGGACTGAATCGGAGATGGAGACCCCCAGTGCCATCAATG6C AACCCATCCTGGCACCTGGCAGACAGCCCCGCGGTGAATGGAGCCACTGGCCACAGCAGCAGTTTGGATGCCCGG GCATTCAGTGACCTGACATCCCAGCTCCACATCACCCCAGGGACAGCATATCAGAGCTTTGAACAGGTAGTGAAT GAACTCTTCCGGGATGGGGTAAACTGGGGTCGCATTGTGGCCTTTTTCTCCTTCGGCGGGGCACTGTGCGTGGAA AGCGTAGACAAGGAGATGCAGGTATTGGTGAGTCGGATCGCAGCTTGGATGGCCACTTACCTGAATGACCACCTA GAGCCTTGGATCCAGGAGAACGGCGGCTGGGATACTTTTGTGGAACTCTATGGGAACAATGCAGCAGCCGAGAGC CGAAAGGGCCAGGAACGCTTCAACCGCTGGTTCCTGACGGGCATGACTGTGGCCGGCGTGGTTCTGCTGGGCTCA CTCTTCAGTCGGAAATGACCAGACACTGACCATCCACTCTACCCTCCCACCCCTTCTCTGCTCCACCACCACCCTCT CCGTCCAGCCGCCATTGCCACCAGGAGAACCACTACATGCAGCCCATGCCCACCTGCCCATCACAGGGTTGGGCC CAGATCTGGTCCCTTGCAGCTAGTTTTCTAGAATTTATCACACTTCTGTGAGACCCCCACACCTCAGTTCCCTTG GCCTCAGAATTCACAAAATTTCCACAAAATCTGTCCAAAGGAGGCTGGCAGGTATGGAAGGGTTTGTGGCTGGGG GCAGGAGGCCCTACCTGATTGGTGCAACCCTTACCCCTTAGCCTCCTGAAAATGTTTTTCTGCCAGGGAGCTT GAAAGTTTTCAGAACCTCTTCCCCAGAAAGGAGACTAGATTGCCTTTGTTTTTGATGTTTTGTGGCCTCAGAATTGA AGGGGGCTATAGCTACAGGAAGCACCCCATGCCAAAGCTAGGGTGGCCCTTGCAGTTCAGCACCACCCTAGTCCC TTCCCCTCCCTGGCTCCCATGACCATACTGAGGGACCAACTGGGCCCAAGACAGATGCCCCAGAGCTGTTTATGG CCTCAGCTGCCTCACTTCCTACAAGAGCAGCCTGTGGCATCTTTGCCTTGGGCTGCTCCTCATGGTGGGTTCAGG GGACTCAGCCCTGAGGTGAAAGGGAGCTATCAGGAACAGCTATGGGAGCCCCAGGGTCTTCCCTACCTCAGGCAG AGATCTGTGCCCCATGCCTGTCCAGCCTGGGCAGCCAGGCTGCCAAGGCCAGAGTGGCCTGGCCAGGAGCTCTTC AGGCCTCCCTCTCTCTCTCTCCCCCCCTTGGCCTGTCTCATCCCCAGGGGTCCCAGCCACCCCGGGCTCTCTGC TGTACATATTTGAGACTAGTTTTTATTCCTTGTGAAGATGATATACTATTTTTGTTAAGCGTGTCTGTATTTATG TGTGAGGAGCTGCTGGCTTGCAGTGCGCGTGCACGTGGAGAGCTGGTGCCCGGAGATTGGACGGCCTGATGCTCC CTCCCCTGCCCTGGTCCAGGGAAGCTGGCCGAGGGTCCTGGCCTCTGAGGGGCATCTGCCCCTCCCCCAACCCCC ACCCCACACTTGTTCCAGCTCTTTGAAATAGTCTGTGTGAAGGTGAAAGTGCAGTTCAGTAATAAACTGTGTTTA CTCAGTGAAAAAAAAAAAAAAAAAA

1055/2682 FIGURE 968

MSQSNRELVVDFLSYKLSQKGYSWSQFSDVEENRTEAPEGTESEMETPSAINGNPSWHLADSPAVNGATGHSSSL DAREVIPMAAVKQALREAGDEFELRYRRAFSDLTSQLHITPGTAYQSFEQVVNELFRDGVNWGRIVAFFSFGGAL CVESVDKEMQVLVSRIAAWMATYLNDHLEPWIQENGGWDTFVELYGNNAAAESRKGQERFNRWFLTGMTVAGVVL LGSLFSRK

1056/2682 FIGURE 969A

TTCGCCGTTTGAATTGCTGCGGGCCCGGGCCCTCACCTCACCTGAGGTCCGGCCGCCCAGGGGTGCGCTATCCCG TCGGGAGGTGACCAGTCGCCACCGCCCCCCCCTCCCGCGCGGCGGCGCAGCCTCGGATGAGGAGGAGGAGGAC GACGGCGAGGCGGAAGACGCCGCGCCGTCTGCCGAGTCGCCCACCCCTCAGATCCAGCAGCGGTTCGACGAGCTG TGCAGCCGCCTCAACATGGACGAGGCGGCGCGCCCGAGGCCTGGGACAGCTACCGCAGCATGAGCGAAAGCTAC ACGCTGGAGGGAAATGATCTTCATTGGTTAGCATGTGCCTTATATGTGGCTTGCAGAAAATCTGTTCCAACTGTA AGCAAAGGGACAGTGGAAGGAAACTATGTATCTTTAACTAGAATCCTGAAATGTTCAGAGCAGAGCTTAATCGAA TTTTTAATAAGATGAAGAAGTGGGAAGACATGGCAAATCTACCCCCACATTTCAGAGAACGTACTGAGAGATTA GAAAGAAACTTCACTGTTTCTGCTGTAATTTTTAAGAAATATGAACCCATTTTTCAGGACATCTTTAAATACCCT CAAGAGGAGCAACCTCGTCAGCAGCGAGGAAGGAAACAGCGGCGACAGCCCTGTACTGTGTCTGAAATTTTCCAT TTTTGTTGGGTGCTTTTTATATATGCAAAAGGTAATTTCCCCATGATTAGTGATGATTTGGTCAATTCTTATCAC CTGCTGCTGTGTGCTTTGGACTTAGTTTATGGAAATGCACTTCAGTGTTCTAATCGTAAAGAACTTGTGAACCCT AATTTTAAAGGCTTATCTGAAGATTTTCATGCTAAAGATTCTAAACCTTCCTCTGACCCCCCTTGTATCATTGAG AAACTGTGTTCCTTACATGATGGCCTAGTTTTGGAAGCAAAGGGGATAAAGGAACATTTCTGGAAACCCTATATT AGGAAACTTTATGAAAAAAAGCTCCTTAAGGGAAAAGAAGAAAATCTCACTGGGTTTCTAGAACCTGGGAACTTT GGAGAGAGTTTTAAAGCCATCAATAAGGCCTATGAGGAGTATGTTTTATCTGTTGGGAATTTAGATGAGCGGATA TTTCTTGGAGAGGATGCTGAGGAGGAAATTGGGACTCTCTCAAGGTGTCTGAACGCTGGTTCAGGAACAGAGACT GCTGAAAGGGTGCAGATGAAAAACATCTTACAGCAGCATTTTGACAAGTCCAAAGCACTTAGAATCTCCACACCA CGTCTTCACACCATGCTGACAGGCCTCAGGAATGCACCAAGTGAGAAACTGGAACAGATTCTCAGGACATGTTCC GAGGATTTCAGTAATTGTGCTAAAGAAATTGCCAGCAAACATTTTCGTTTTGCGGAGATGCTTTACTATAAAGTA TTAGAATCTGTTATTGAGCAGGAACAAAAAAGACTAGGAGACATGGATTTATCTGGTATTCTGGAACAAGATGCA TTCCACAGATCTCTCTTGGCCTGCCTTGAGGTCGTCACTTTTTCTTATAAGCCTCCTGGGAATTTTCCATTT ATTACTGAAATATTTGATGTGCCTCTTTATCATTTTTATAAGGTGATAGAAGTATTCATTAGAGCAGAAGATGGC CTTTGTAGAGAGGTGGTAAAACACCTTAATCAGATTGAAGAACAGATCTTAGATCATTTGGCATGGAAACCAGAG TCTCCACTCTGGGAAAAAATTAGAGACAATGAAAACAGAGTTCCTACATGTGAAGAGGTCATGCCACCTCAGAAC CTGGAAAGGGCAGATGAAATTTGCATTGCTGGCTCCCCTTTGACTCCCAGAAGGGTGACTGAAGTTCGTGCTGAT ACCAGAAGGCGGCTATTTGTTGAGAATGATAGCCCCTCTGATGGAGGGACGCCTGGGCGCATGCCCCCACAGCCC CTAGTCAATGCTGTCCCTGTGCAGAATGTATCTGGGGAGACTGTTTCTGTCACACCAGTTCCTGGACAGACTTTG GTCACCATGGCAACCGCCACTGTCACAGCCAACAATGGGCAAACGGTAACCATTCCTGTGCAAGGTATTGCCAAT CAGCCCCTCAGTGCTCAGGCCCTGGCTGGAAGTCTGAGCTCTCAACAGGTGACAGGAACAACTTTGCAAGTCCCT GGTCAAGTGGCCATTCAACAGATTTCCCCAGGTGGCCAACAGCAGAAGCAAGGCCAGTCTGTAACCAGCAGTAGT AATAGACCCAGGAAGACCAGCTCTTTATCGCTTTTCTTTAGAAAGGTATACCATTTAGCAGCTGTCCGCCTTCGG GATCTCTGTGCCAAACTAGATATTTCAGATGAATTGAGGAAAAAAATCTGGACCTGCTTTGAATTCTCCATAATT CAGTGTCCTGAACTTATGATGGACAGACATCTGGACCAGTTATTAATGTGTGCCATTTATGTGATGGCAAAGGTC ACAAAAGAAGATAAGTCCTTCCAGAACATTATGCGTTGTTATAGGACTCAGCCGCAGGCCCGGAGCCAGGTGTAT AGAAGTGTTTTGATAAAAGGGAAAAGAAAAAGAAAATTCTGGCAGCAGTGATAGCAGAAGCCATCAGAATTCT CCAACAGAACTAAACAAAGATAGAACCAGTAGAGACTCCAGTCCAGTTATGAGGTCAAGCAGCACCTTGCCAGTT GGAGACCTCATTCAGTTCTACAACAACATCTACATCAAACAGATTAAGACATTTGCCATGAAGTACTCACAGGCA AATATGGATGCTCCTCCACTCTCCCCTATCCATTTGTAAGAACAGGCTCCCCTCGCCGAATACAGTTGTCTCAA AATCATCCTGTCTACATTTCCCCACATAAAAATGAAACAATGCTTTCTCCTCGAGAAAAGATTTTCTATTACTTC AGCAACAGTCCTTCAAAGAGACTGAGAGAAATTAATAGTATGATACGCACAGGAGAAACTCCTACTAAAAAGAGA GGAATTCTTTTGGAAGATGGAAGTGAATCACCTGCAAAAAGAATTTGCCCAGAAAATCATTCTGCCTTATTACGC CGTCTCCAAGATGTAGCTAATGACCGTGGTTCCCAC<u>TGA</u>GGTTAGTCTCTTGTATTAAACTCTTCACAAAATCTG TTTAGCAGCAGCCTTTAATGCATCTAGATTATGGAGCTTTTTTCCTTAATCCAGCTGATGAGTTACAGCCTGTTA

1057/2682 FIGURE 969B

GTAACATGAGGGGACATTTTGGTGAGAAATGGGACTTAACTCCTTCCAGTGTCCTTAGAACATTTTAATTCATCC ${\tt CAACTGTCTTTTTTCCCTACCACTCAGTGATTACTGTCAAGGCTGCTTACAATCCAAACTTGGGTTTTTTGGCTC}$ TGGCAAAGCTTTTAGAAATACTGCAAGAAATGATGTGTACCCAACGTGAGCATAGGAGGCTTCTGTTGACGTCTC CAACAGAAGAACTGTGTTTCAAGTTCAATCCTACCTGTTTTTGTGGTCAGCTGTAGTCCTCATAAAAAAGCAAAACA AAAATTAGGTATTTTGTCCTAAAACACCTGGTAGGAGTGTGTGATTTTTTGCATTCCTGACAAAGGAGAGCACAC CCAGGTTTGGAGGTCCTAGGTCATTAGCCCTCGTCTCCCGTTCCCTTTGTGCACATCTTCCCTCTCCCCATTCGG TGTGGTGCAGTGTGAAAAGTCCTTGATTGTTCGGGTGTGCAATGTCTGAGTGAACCTGTATAAGTGGAGGCACTT ${\tt TAGGGCTGTAAAATGCATGATTTTGTAACCCAGATTTTGCTGTATATTTTGTGATAGCACTTTCTACAATGTGAAC}$ AACCCCTATAGCCACCTTTTGGGAATGTTTTAAATTCTCCAGTTTTTTGTTATATAGGGATCAACCAGCTAAGAA AGAATTTAGGTTTTTATTAGTACCATAGTACCATTTATACAAATTAGAAAATGTTATTTAACAGCTGAATTATCT ATACATATCTTTATTAATCACTATTGTTCCAGCAGTTTTCAAGTCAAATTAATAATCTTATTAGGGAGAAAATTC AATTGTAAATTGAATCAGTATAAACAAAGTTACTAGGTAACTTCATATTGCTGAGAGAAATATGGAACTTACATT GTTCAATTAGAATAGTGTTCTCCCCAAATATTTATAAAACTTCTCAAGATACTGCTACGTGTAATTTTATATGAA

1058/2682 FIGURE 970

MPSGGDQSPPPPPPPPAAAASDEEEEDDGEAEDAAPSAESPTPQIQQRFDELCSRLNMDEAARPEAWDSYRSMSE SYTLEGNDLHWLACALYVACRKSVPTVSKGTVEGNYVSLTRILKCSEQSLIEFFNKMKKWEDMANLPPHFRERTE ${\tt RLERNFTVSAVIFKKYEPIFQDIFKYPQEEQPRQQRGRKQRRQPCTVSEIFHFCWVLFIYAKGNFPMISDDLVNS}$ YHLLLCALDLVYGNALQCSNRKELVNPNFKGLSEDFHAKDSKPSSDPPCIIEKLCSLHDGLVLEAKGIKEHFWKP YIRKLYEKKLLKGKEENLTGFLEPGNFGESFKAINKAYEEYVLSVGNLDERIFLGEDAEEEIGTLSRCLNAGSGT ETAERVQMKNILQQHFDKSKALRISTPLTGVRYIKENSPCVTPVSTATHSLSRLHTMLTGLRNAPSEKLEQILRT CSRDPTQAIANRLKEMFEIYSQHFQPDEDFSNCAKEIASKHFRFAEMLYYKVLESVIEQEQKRLGDMDLSGILEQ DAFHRSLLACCLEVVTFSYKPPGNFPFITEIFDVPLYHFYKVIEVFIRAEDGLCREVVKHLNQIEEQILDHLAWK PESPLWEKIRDNENRVPTCEEVMPPQNLERADEICIAGSPLTPRRVTEVRADTGGLGRSITSPTTLYDRYSSPPA ${\tt STTRRRLFVENDSPSDGGTPGRMPPQPLVNAVPVQNVSGETVSVTPVPGQTLVTMATATVTANNGQTVTIPVQGI}$ ${\tt ANENGGITFFPVQVNVGGQAQAVTGSIQPLSAQALAGSLSSQQVTGTTLQVPGQVAIQQISPGGQQQKQGQSVTS}$ ${\tt SSNRPRKTSSLSLFFRKVYHLAAVRLRDLCAKLDISDELRKKIWTCFEFSIIQCPELMMDRHLDQLLMCAIYVMA}$ KVTKEDKSFQNIMRCYRTQPQARSQVYRSVLIKGKRKRRNSGSSDSRSHQNSPTELNKDRTSRDSSPVMRSSSTL ${\tt PVPQPSSAPPTPTRLTGANSDMEEEERGDLIQFYNNIYIKQIKTFAMKYSQANMDAPPLSPYPFVRTGSPRRIQL}$ SONHPVYISPHKNETMLSPREKIFYYFSNSPSKRLREINSMIRTGETPTKKRGILLEDGSESPAKRICPENHSAL LRRLODVANDRGSH

1059/2682 FIGURE 971A

TTCGCCGTTTGAATTGCTGCGGGCCCGGGCCCTCACCTCACCTGAGGTCCGGCCGCCCAGGGGTGCGCTATGCCG GACGGCGAGGCGGAAGACGCCGCCGCCGTCTGCCGAGTCGCCCACCCCTCAGATCCAGCAGCGGTTCGACGAGCTG TGCAGCCGCCTCAACATGGACGAGGCGGCGCGCCCGAGGCCTGGGACAGCTACCGCAGCATGAGCGAAAGCTAC ACGCTGGAGGGAAATGATCTTCATTGGTTAGCATGTGCCTTATATGTGGCTTGCAGAAAATCTGTTCCAACTGTA AGCAAAGGGACAGTGGAAGGAAACTATGTATCTTTAACTAGAATCCTGAAATGTTCAGAGCAGAGCTTAATCGAA TTTTTTAATAAGATGAAGAAGTGGGAAGACATGGCAAATCTACCCCCACATTTCAGAGAACGTACTGAGAGATTA GAAAGAAACTTCACTGTTTCTGCTGTAATTTTTAAGAAATATGAACCCATTTTTCAGGACATCTTTAAATACCCT CAAGAGCAGCCTCGTCAGCAGCGAGGAAGGAAACAGCGGCGACAGCCCTGTACTGTGTCTGAAATTTTCCAT TTTTGTTGGGTGCTTTTTATATATGCAAAAGGTAATTTCCCCATGATTAGTGATGATTTGGTCAATTCTTATCAC CTGCTGCTGTGTGTTTTGGACTTAGTTTATGGAAATGCACTTCAGTGTTCTAATCGTAAAGAACTTGTGAACCCT AATTTTAAAGGCTTATCTGAAGATTTTCATGCTAAAGATTCTAAACCTTCCTCTGACCCCCCTTGTATCATTGAG AAACTGTGTTCCTTACATGATGGCCTAGTTTTGGAAGCAAAGGGGATAAAGGAACATTTCTGGAAACCCTATATT AGGAAACTTTATGAAAAAAAGCTCCTTAAGGGAAAAGAAGAAAATCTCACTGGGTTTCTAGAACCTGGGAACTTT GGAGAGAGTTTTAAAGCCATCAATAAGGCCTATGAGGAGTATGTTTTATCTGTTGGGAATTTAGATGAGCGGATA TTTCTTGGAGAGGATGCTGAGGAGGAAATTGGGACTCTCTCAAGGTGTCTGAACGCTGGTTCAGGAACAGAGACT GCTGAAAGGGTGCAGATGAAAAACATCTTACAGCAGCATTTTGACAAGTCCAAAGCACTTAGAATCTCCACACCA CTAACTGGTGTTAGGTACATTAAGGAGAATAGCCCTTGTGTGACTCCAGTTTCTACAGCTACGCATAGCTTGAGT CGTCTTCACACCATGCTGACAGGCCTCAGGAATGCACCAAGTGAGAAACTGGAACAGATTCTCAGGACATGTTCC GAGGATTTCAGTAATTGTGCTAAAGAAATTGCCAGCAAACATTTTCGTTTTGCGGAGATGCTTTACTATAAAGTA TTAGAATCTGTTATTGAGCAGGAACAAAAAAGACTAGGAGACATGGATTTATCTGGTATTCTGGAACAAGATGCA TTCCACAGATCTCTCTTGGCCTGCCTTGAGGTCGTCACTTTTTCTTATAAGCCTCCTGGGAATTTTCCATTT ATTACTGAAATATTTGATGTGCCTCTTTATCATTTTTATAAGGTGATAGAAGTATTCATTAGAGCAGAAGATGGC CTTTGTAGAGAGGTGGTAAAACACCTTAATCAGATTGAAGAACAGATCTTAGATCATTTGGCATGGAAACCAGAG TCTCCACTCTGGGAAAAATTAGAGACAATGAAAACAGAGTTCCTACATGTGAAGAGGTCATGCCACCTCAGAAC CTGGAAAGGGCAGATGAAATTTGCATTGCTGGCTCCCCTTTGACTCCCAGAAGGGTGACTGAAGTTCGTGCTGAT ACCAGAAGGCGGCTATTTGTTGAGAATGATAGCCCCTCTGATGGAGGGACGCCTGGGCGCATGCCCCCACAGCCC CTAGTCAATGCTGTCCCTGTGCAGAATGTATCTGGGGAGACTGTTTCTGTCACACCCAGTTCCTGGACAGACTTTG GTCACCATGGCAACCGCCACTGTCACAGCCAACAATGGGCAAACGGTAACCATTCCTGTGCAAGGTATTGCCAAT ${\tt CAGCCCTCAGTGCTCAGGCCCTGGCTGGAAGTCTGAGCTCTCAACAGGTGACAGGAACAACTTTGCAAGTCCCT}$ GGTCAAGTGGCCATTCAACAGATTTCCCCAGGTGGCCAACAGCAGAAGCAAGGCCAGTCTGTAACCAGCAGTAGT AATAGACCCAGGAAGACCAGCTCTTTATCGCTTTTCTTTAGAAAGGTATACCATTTAGCAGCTGTCCGCCTTCGG GATCTCTGTGCCAAACTAGATATTTCAGATGAATTGAGGAAAAAAATCTGGACCTGCTTTGAATTCTCCATAATT CAGTGTCCTGAACTTATGATGGACAGACATCTGGACCAGTTATTAATGTGTGCCATTTATGTGATGGCAAAGGTC ACAAAAGAAGATAAGTCCTTCCAGAACATTATGCGTTGTTATAGGACTCAGCCGCAGGCCCGGAGCCAGGTGTAT AGAAGTGTTTTGATAAAAGGGAAAAGAAAAAGAAAATTCTGGCAGCAGTGATAGCAGAAGCCATCAGAATTCT CCAACAGAACTAAACAAAGATAGAACCAGTAGAGACTCCAGTCCAGTTATGAGGTCAAGCAGCACCTTGCCAGTT CCACAGCCCAGCAGTGCTCCTCCCACACCTACTCGCCTCACAGGTGCCAACAGTGACATGGAAGAAGAAGAAGAAGA GGAGACCTCATTCAGTTCTACAACAACATCTACATCAAACAGATTAAGACATTTGCCATGAAGTACTCACAGGCA AATATGGATGCTCCTCCACTCTCTCCCTATCCATTTGTAAGAACAGGCTCCCCTCGCCGAATACAGTTGTCTCAA AATCATCCTGTCTACATTTCCCCACATAAAAATGAAACAATGCTTTCTCCTCGAGAAAAGATTTTCTATTACTTC AGCAACAGTCCTTCAAAGAGACTGAGAGAAATTAATAGTATGGTACGCACAGGAGAAACTCCTACTAAAAAGAGA GGAATTCTTTTGGAAGATGGAAGTGAATCACCTGCAAAAAGAATTTGCCCAGAAAATCATTCTGCCTTATTACGC CGTCTCCAAGATGTAGCTAATGACCGTGGTTCCCACTGAGGTTAGTCTCTTGTATTAAACTCTTCACAAAATCTG TTTAGCAGCAGCCTTTAATGCATCTAGATTATGGAGCTTTTTTCCTTAATCCAGCTGATGAGTTACAGCCTGTTA

1060/2682 FIGURE 971B

GTAACATGAGGGGACATTTTGGTGAGAAATGGGACTTAACTCCTTCCAGTGTCCTTAGAACATTTTAATTCATCC CAACTGTCTTTTTTTCCCTACCACTCAGTGATTACTGTCAAGGCTGCTTACAATCCAAACTTGGGTTTTTGGCTC TGGCAAAGCTTTTAGAAATACTGCAAGAAATGATGTGTACCCAACGTGAGCATAGGAGGCTTCTGTTGACGTCTC CAACAGAAGAACTGTGTTTCAAGTTCAATCCTACCTGTTTTGTGGTCAGCTGTAGTCCTCATAAAAAGCAAAACA AAAATTAGGTATTTTGTCCTAAAACACCTGGTAGGAGTGTGTGATTTTTTGCATTCCTGACAAAGGAGAGCACAC CCAGGTTTGGAGGTCCTAGGTCATTAGCCCTCGTCTCCCGTTCCCTTTGTGCACATCTTCCCTCTCCCCATTCGG TGTGGTGCAGTGTGAAAAGTCCTTGATTGTTCGGGTGTGCAATGTCTGAGTGAACCTGTATAAGTGGAGGCACTT TAGGGCTGTAAAATGCATGATTTTGTAACCCAGATTTTGCTGTATATTTTGTGATAGCACTTTCTACAATGTGAAC TTTATTAAATACAAAACTTCCAGGCTAAACATCCAATATTTTCTTTAATGCTTTTATATTTTTTTAAAATGTTAA AACCCCTATAGCCACCTTTTGGGAATGTTTTAAATTCTCCAGTTTTTTGTTATATAGGGATCAACCAGCTAAGAA AGAATTTAGGTTTTTATTAGTACCATAGTACCATTTATACAAATTAGAAAATGTTATTTAACAGCTGAATTATCT ATACATATCTTTATTAATCACTATTGTTCCAGCAGTTTTCAAGTCAAATTAATAATCTTATTAGGGAGAAAATTC AATTGTAAATTGAATCAGTATAAACAAAGTTACTAGGTAACTTCATATTGCTGAGAGAAATATGGAACTTACATT GTTCAATTAGAATAGTGTTCTCCCCAAATATTTATAAAACTTCTCAAGATACTGCTACGTGTAATTTTATATGAA

1061/2682 FIGURE 972

MPSGGDQSPPPPPPPAAAASDEEEEDDGEAEDAAPSAESPTPQIQQRFDELCSRLNMDEAARPEAWDSYRSMSE SYTLEGNDLHWLACALYVACRKSVPTVSKGTVEGNYVSLTRILKCSEQSLIEFFNKMKKWEDMANLPPHFRERTE RLERNFTVSAVIFKKYEPIFQDIFKYPQEEQPRQQRGRKQRRQPCTVSEIFHFCWVLFIYAKGNFPMISDDLVNS YHLLLCALDLVYGNALQCSNRKELVNPNFKGLSEDFHAKDSKPSSDPPCIIEKLCSLHDGLVLEAKGIKEHFWKP YIRKLYEKKLLKGKEENLTGFLEPGNFGESFKAINKAYEEYVLSVGNLDERIFLGEDAEEEIGTLSRCLNAGSGT ETAERVQMKNILQQHFDKSKALRISTPLTGVRYIKENSPCVTPVSTATHSLSRLHTMLTGLRNAPSEKLEQILRT CSRDPTQAIANRLKEMFEIYSQHFQPDEDFSNCAKEIASKHFRFAEMLYYKVLESVIEQEQKRLGDMDLSGILEQ DAFHRSLLACCLEVVTFSYKPPGNFPFITEIFDVPLYHFYKVIEVFIRAEDGLCREVVKHLNQIEEQILDHLAWK PESPLWEKIRDNENRVPTCEEVMPPQNLERADEICIAGSPLTPRRVTEVRADTGGLGRSITSPTTLYDRYSSPPA ${\tt STTRRRLFVENDSPSDGGTPGRMPPQPLVNAVPVQNVSGETVSVTPVPGQTLVTMATATVTANNGQTVTIPVQGI}$ ANENGGITFFPVQVNVGGQAQAVTGSIQPLSAQALAGSLSSQQVTGTTLQVPGQVAIQQISPGGQQQKQGQSVTS SSNRPRKTSSLSLFFRKVYHLAAVRLRDLCAKLDISDELRKKIWTCFEFSIIQCPELMMDRHLDQLLMCAIYVMA ${\tt KVTKEDKSFQNIMRCYRTQPQARSQVYRSVLIKGKRKRRNSGSSDSRSHQNSPTELNKDRTSRDSSPVMRSSSTL}$ ${\tt PVPQPSSAPPTPTRLTGANSDMEEEERGDLIQFYNNIYIKQIKTFAMKYSQANMDAPPLSPYPFVRTGSPRRIQL}$ SONHPVYISPHKNETMLSPREKIFYYFSNSPSKRLREINSMIRTGETPTKKRGILLEDGSESPAKRICPENHSAL LRRLQDVANDRGSH

1062/2682 FIGURE 973

TGGGCAATTAACCAAGCCATAGCCAATGAATATGAAGTCCGGAGAAAGCTGCTAATAAAACGTTTGGATGTCACT TCAGTCTTATCCCCTAAAACTACTATTTCTGTTGCCCATCTTTTGGCTGCAAGGCAGGACTTGTCAAAGATTTTA AGGACAAGCAGCGGCTCTATAAGAGAAAAGACTGCCTGTGCCATCAATAAGGTGTTGATGGGCAGGGTGCCTGAC AGAGGTGGTAGACCCAATGAAATCGAACCTCCACCCCAGAGATGCCACCGTGGCAGAAGAGGCAAGATGGCCCC CAGCAGCAAACAGGAGGCCGAGTAGGAGGGAGAGGTGGCTATGAACATTCCTCATACGGAGGACGAGGAGGTCAT GAACAAGGAGGCGGAGAGGTGGACGTGGTGGCTATGACCATGGTGGCCGAGGGGGAGGAAGAGAAATAAGCAT CAAGGAGGCTGGACAGATGGAGGAGTGGTGGAGGAGGTGGCTACCAAGATGGTGGTTATCGAGATTCAGGTTTC CAGCCAGGTGGCTATCATGGTGGCCACAGCAGTGGTGGCTATCAAGGCGGAGGTTATGGTGGCTTCCAAACATCT TCTTCATATACAGGAAGTGGATACCAGGGTGGTGGCTACCAGCAGGACAATAGATACCAAGATGGCGGGCACCAT GGTGATCGTGGTGGTCGTGGTGGGCGAGGTGGTCGTGGAGGCCGAGGTGGTCGTGCAGGCCAGGGAGGAGGC TGGGGAGGAGGGGGGCCAGAATTATCACCAAGGGGGTCAATTTGAACAGCATTTCCAGCATGGAGGTTATCAG TATAATCATTCTGGATTTGGACAGGGAAGACATTACACTAGT<u>TGA</u>GGCTACCGAACTTTACATTTTGCTAGAGCT CAAGTAATAGAAACTTAGTTTCAGAATCCTGAATTCAGCACCTATTTTGAATTAATGTGAGACCACAGGTGGCAG TGCCGTTTATTTGAGAAACACATAACATCTCTCCTTCCTATGAAAAATTTTTTAAAAGGTGGTTAAAATTGCCTT TAATTGCCCAGTAGACTAATTCCACAGTCAGAACATGCAAACTTTTTTGAAGAAATTACTTGAATAAGTAGTTTT CATGTTTTCAATATGCAGTTTTGAAAATGAGGATTCACCTAGACTTTTTTAGATTTACTACTAGGAAACCTTCCT CATATGAATAACCATTTATATGTGTTTTGCTTAAAGTATTCCAATGCCTATTTTCCAAGCACAGTTCTGCCCCCC GGTTGACTTTTATGCCACGTGTGCTTCATGATGGAACTTTTAGGTCAGTTCCTATTAAATGAGCTCTTCTGCAGA TAGCACATTCAGTAGCCTTATTTTGTTGATGGAATACTGTATCATATGCTCAACTCTGAAAACCTTGAACACGGC CAAAATCCATAAAGATTATAAAAGCAAACTAAGTTGTGAAGCTATAGTACATGTAGGCATTTAGTTAAGTATAGC **AATTCAAACTGACCTGCATCCATCCAAAACAAATTCCTCCTTCAACCTTATTTTTACTTGAAATTTGCTAGAAGA** CAGGTAACTTTTTTTGTAATGGAAGAAATGCACTACAAAGTTAAGACAGATTTTTGCTAAGTGCAGGAGGCCCTT TATTATTGCTGCAGAAAACAAAAGCCTGGCTGAGTTGATGTTTTACATTCTCCCTTACTGAAATCTACATGACAT

FIGURE 974

WAINQAIANEYEVRRKLLIKRLDVTVQSFGWSDRAKSQTEKLAKVYQPKRSVLSPKTTISVAHLLAARQDLSKIL RTSSGSIREKTACAINKVLMGRVPDRGGRPNEIEPPPPEMPPWQKRQDGPQQQTGGRVGGRGGYEHSSYGGRGGH EQGGGRGGRGGYDHGGRGGGRGHKHQGGWTDGGSGGGGYQDGGYRDSGFQPGGYHGGHSSGGYQGGGYGGFQTS SSYTGSGYQGGGYQDDRRYQDGGHHGDRGGGRGGRGGRGGRAGQGGWGGRGSQNYHQGGQFEQHFQHGGYQ YNHSGFGQGRHYTS

1064/2682 FIGURE 975

ATCGCAGCCCGAGTACTTATAATTGGCAGTGGAGGAAGGGAACATACGCTGGCCTGGAAACTTGCACAGTCTCAT TCAATCAGTGACCACACTGCCCTTGCTCAATTCTGCAAAGAGAAAAATTGAATTTGTAGTTGTTGGACCAGAA GCACCTCTGGCTGCTGGGATTGTTGGGAACCTGAGGTCTGCAGGAGTGCAATGCTTTGGCCCAACAGCAGAAGCG GCTTTCACCAAACCTGAAGAAGCCTGCAGCTTCATTTTGAGTGCAGACTTCCCTGCTTTGGTTGTGAAGGCCAGT GGTCTTGCAGCTGGAAAAGGGGTGATTGTTGCAAAGAGCAAAGAAGAGCCTGCAAAGCTGTACAAGAGATCATG CAGGAGAAAGCCTTTGGGGCAGCTGGAGAAACAATTGTCATTGAAGAACTTCTTGACGGAGAAGAGGTGTCGTGT GGTGGCCCTAACACAGGGGGAATGGGAGCCTATTGTCCAGCCCCTCAGGTTTCTAATGATCTATTACTAAAAATT **AAAGATACTGTTCTTCAGAGGACAGTGGATGGCATGCAGCAAGAGGGTACTCCATATACAGGTATTCTCTATGCT** GGAATAATGCTGACCAAGAATGGCCCAAAAGTTCTAGAGTTTAATTGCCGTTTTGGTGATCCAGAGTGCCAAGTA ATCCTCCCACTTCTTAAAAGTGATCTTTATGAAGTGATTCAGTCCACCTTAGATGGACTGCTCTGCACATCTCTG CCTGTTTGGCTAGAAAACCACACCGCCCTAACTGTTGTCATGGCAAGTAAAGGTTATCCTGGAGACTACACCAAG GGTGTAGAGATAACAGGGTTTCCTGAGGCTCAAGCTCTAGGACTGGAGGTGTTCCATGCAGGCACTGCCCTCAAA AATGGCAAAGTAGTAACTCATGGGGGTAGAGTTCTTGCAGTCACAGCCATCCGGGAAAATCTCATATCAGCCCTT GAGGAAGCCAAGAAAGGACTAGCTGCTATAAAGTTTGAGGGAGCAATTTATAGGAAAGACGTCGGCTTTCGTGCC ATAGCTTTCCTCCAGCAGCCCAGGAGTTTGACTTACAAGGAATCTGGAGTAGATATCGCAGCTGGAAATATGCTG GTCAAGAAAATTCAGCCTTTAGCAAAAGCCACTTCCAGATCAGGCTGTAAAGTTGATCTTGGAGGTTTTGCTGGT CTTTTTGATTTAAAAGCAGCTGGTTTCAAAGATCCCCTTCTGGCCTCTGGAACAGATGGCGTTGGAACTAAACTA AAGATTGCCCAGCTATGCAATAAACATGATACCATTGGTCAAGATTTGGTAGCAATGTGTGTTAATGATATTCTG GCACAAGGAGCAGAGCCCCTCTTCTTCCTTGATTACTTTTCCTGTGGAAAACTTGACCTCAGTGTAACTGAAGCT GTTGTTGCTGGAATTGCTAAAGCTTGTGGAAAAGCTGGATGTGCTCTCCTTGGAGGTGAAACAGCAGAAATGCCT GACATGTATCCCCCTGGAGAGTATGACCTAGCTGGGTTTGCCGTTGGTGCCATGGAGCGAGATCAGAAACTCCCT CACCTGGAAAGAATCACTGAGGGTGATGTTGTTGTTGGAATAGCTTCATCTGGTCTTCATAGCAATGGATTTAGC CTTGTGAGGAAAATCGTTGCAAAATCTTCCCTCCAGTACTCCTCCAGCACCTGATGGTTGTGGTGACCAGACT TTAGGGGACTTACTTCTCACGCCTACCAGAATCTACAGCCATTCACTGTTACCTGTCCTACGTTCAGGACATGTC AAAGCCTTTGCCCATATTACTGGTGGAGGATTACTAGAGAACATCCCCAGAGTCCTCCCTGAGAAACTTGGGGTA AGGGATATCCAGCAGCACAAGGAAGAAGCCTGGGTGATTGGCAGTGTGGTTGCACGAGCTGAAGGTTCCCCACGT GTGAAAGTCAAGAATCTGATTGAAAGCATGCAAATAAATGGGTCAGTGTTGAAGAATGGCTCCCTGACAAATCAT TTCTCTTTTGAAAAAAAAAGGCCAGAGTGGCTGTCTTAATATCTGGAACAGGATCGAACCTGCAAGCACTTATA GACAGTACTCGGGAACCAAATAGCTCTGCACAAATTGATATTGTTATCTCCAACAAAGCCGCAGTAGCTGGGTTA GGCCCCTTTGTCCAAAAGTGGAATGGAAAAATGCTCAATATCCACCCATCCTTGCTCCCTTCTTTTAAGGGTTCA AATGCCCATGAGCAAGCCCTGGAAACCGGAGTCACAGTTACTGGGTGCACTGTACACTTTGTAGCTGAAGATGTG GATGCTGGACAGATTATTTTGCAAGAAGCTGTTCCCGTGAAGAGGGGGTGATACTGTCGCAACTCTTTCTGAAAGA GTAAAATTAGCAGAACATAAAATATTTCCTGCAGCCCTTCAGCTGGTGGCCAGTGGAACTGTACAGCTTGGAGAA AATGGCAAGATCTGTTGGGTTAAAGAGGAA**TGA**

1065/2682 FIGURE 976

MAARVLIIGSGGREHTLAWKLAQSHHVKQVLVAPGNAGTACSEKISNTAISISDHTALAQFCKEKKIEFVVVGPE
APLAAGIVGNLRSAGVQCFGPTAEAAQLESSKRFAKEFMDRHGIPTAQWKAFTKPEEACSFILSADFPALVVKAS
GLAAGKGVIVAKSKEEACKAVQEIMQEKAFGAAGETIVIEELLDGEEVSCLCFTDGKTVAPMPPAQDHKRLLEGD
GGPNTGGMGAYCPAPQVSNDLLLKIKDTVLQRTVDGMQQEGTPYTGILYAGIMLTKNGPKVLEFNCRFGDPECQV
ILPLLKSDLYEVIQSTLDGLLCTSLPVWLENHTALTVVMASKGYPGDYTKGVEITGFPEAQALGLEVFHAGTALK
NGKVVTHGGRVLAVTAIRENLISALEEAKKGLAAIKFEGAIYRKDVGFRAIAFLQQPRSLTYKESGVDIAAGNML
VKKIQPLAKATSRSGCKVDLGGFAGLFDLKAAGFKDPLLASGTDGVGTKLKIAQLCNKHDTIGQDLVAMCVNDIL
AQGAEPLFFLDYFSCGKLDLSVTEAVVAGIAKACGKAGCALLGGETAEMPDMYPPGEYDLAGFAVGAMERDQKLP
HLERITEGDVVVGIASSGLHSNGFSLVRKIVAKSSLQYSSPAPDGCGDQTLGDLLLTPTRIYSHSLLPVLRSGHV
KAFAHITGGGLLENIPRVLPEKLGVDLDAQTWRIPRVFSWLQQEGHLSEEEMARTFNCGVGAVLVVSKEQTEQIL
RDIQQHKEEAWVIGSVVARAEGSPRVKVKNLIESMQINGSVLKNGSLTNHFSFEKKKARVAVLISGTGSNLQALI
DSTREPNSSAQIDIVISNKAAVAGLDKAERAGIPTRVINHKLYKNRVEFDSAIDLVLEEFSIDIVCLAGFMRILS
GPFVQKWNGKMLNIHPSLLPSFKGSNAHEQALETGVTVTGCTVHFVAEDVDAGQIILQEAVPVKRGDTVATLSER
VKLAEHKIFPAALQLVASGTVQLGENGKICWVKEE

1066/2682 FIGURE 977A

TGCCATGCTGCTGCACGGACAGGATGTGATCACTGTGTCCAATGGAGGCCGAATCATGCGTTCCTGGGAGACTAA CATCGGGGGCCTGAACTGGGAGATAACCCTGGACAGTGGCAGTTTCCAGGCACTTGGGCTGGTTGGCCTGCAGGA GTCTGTAAGGTACATCGCAGTCCTGAAGAAGACTACACTTGCCCTCCATCACCTCTCCAGTGGGCACCTCAAGTG GGTGGAACATCTCCCAGAAAGTGACAGCATCCACTACCAGATGGTGTATTCTTACGGCTCTGGGGTGGTGTGGGC CCTCGGAGTTGTTCCCTTCAGCCATGTGAACATTGTCAAGTTTAATGTGGAAGATGGAGAGATTGTTCAGCAGGT TAGGGTTTCAACTCCGTGGCTGCAGCACCTGTCTGGAGCCTGTGGTGGTGGATGAGGCTGTCCTGGTGTGTCC TGACCCGAGCTCACGTTCCCTCCAAACTTTGGCTCTGGAGACGGAATGGGAGTTGAGACAGATCCCACTGCAGTC TCTCGACTTAGAATTTGGAAGTGGATTCCAACCCCGGGTCCTGCCTACCCAGCCCAACCCAGTGGACGCTTCCCG GGCCCAGTTCTTCCTGCACTTGTCCCCAAGCCACTATGCTCTGCTGCAGTACCATTATGGAACGCTGAGTTTGCT TAAAAACTTCCCACAGACTGCCCTAGTGAGCTTTGCCACCACTGGGGAGAAGACGGTGGCTGCAGTCATGGCCTG TCGGAATGAAGTGCAGAAAAGTAGCAGTTCTGAAGATGGGTCAATGGGGAGCTTTTCGGAGAAGTCTAGTTCAAA GGACTCTCTGGCTTGCTTCAATCAGACCTACACCATTAACCTATACCTCGTGGAGACAGGTCGGCGGCTGCTGGA CACCACGATAACATTTAGCCTGGAACAGAGCGGCACTCGGCCTGAGCGGCTGTATATCCAGGTGTTCTTGAAGAA GGATGACTCAGTGGGCTACCGGGCTTTGGTGCAGACAGAGGATCATCTGCTACTTTTCCTGCAGCAGTTGGCAGG GAAGGTGGTGCTGTGGAGCCGTGAGGAGTCCCTGGCAGAAGTGGTGTGCCTAGAGATGGTGGACCTCCCCCTGAC TGGGGCACAGGCCGAGCTGGAAGGAGAATTTGGCAAAAAGGCAGATGGCTTGCTGGGGATGTTCCTGAAACGCCT CTCGTCTCAGCTTATCCTGCTGCAAGCATGGACTTCCCACCTCTGGAAAATGTTTTATGATGCTCGGAAGCCCCG GAGTCAGATTAAGAATGAGATCAACATTGACACCCTGGCCAGAGATGAATTCAACCTCCAGAAGATGATGGTGAT GGTAACAGCCTCAGGCAAGCTTTTTGGCATTGAGAGCAGCTCTGGCACCATCCTGTGGAAACAGTATCTACCCAA TGTCAAGCCAGACTCCTCCTTTAAACTGATGGTCCAGAGAACTACTGCTCATTTCCCCCATCCCCACAGTGCAC CCTGCTGGTGAAGGACAAGGAGTCGGGAATGAGTTCTCTGTATGTCTTCAATCCCATTTTTGGGAAGTGGAGTCA GGTAGCTCCCCCAGTGCTGAAGCGCCCCATCTTGCAGTCCTTGCTTCTCCCAGTCATGGATCAAGACTACGCCAA GGTGTTGCTGTTGATAGATGATGAATACAAGGTCACAGCTTTTCCAGCCACTCGGAATGTCTTGCGACAGCTACA TGAGCTTGCCCCTTCCATCTTCTTCTATTTGGTGGATGCAGAGCAGGGACGGCTGTGTGGATATCGGCTTCGAAA GGATCTCACCACTGAGCTGAGTTGGGAGCTGACCATTCCCCCAGAAGTACAGCGGATCGTCAAGGTGAAGGGGAA ACGCAGCAGTGAGCACGTTCATTCCCAGGGCCGTGTGATGGGGGGACCGCAGTGTGCTCTACAAGAGCCTGAACCC CAACCTGCTGGCCGTGGTGACAGAGAGCACAGACGCGCACCATGAGCGCACCTTTATTGGCATCTTCCTCATTGA TGGCGTCACTGGGCGTATCATTCACTCCTCTGTGCAGAAGAAAGCCAAAGGCCCTGTCCATATCGTGCATTCAGA GAACTGGGTGGTGTACCAGTACTGGAACACCAAGGCTCGGCGCAACGAGTTTACCGTACTGGAGCTCTATGAGGG CACTGAGCAATACAACGCCACCGCCTTCAGCTCCCTGGACCGCCCCCAGCTGCCCCAGGTCCTCCAGCAGTCCTA TATCTTCCCGTCCTCCATCAGTGCCATGGAGGCCACCATCACCGAACGGGGCATCACCAGCCGACACCTGCTGAT TGGACTACCTTCTGGAGCAATTCTTTCCCTTCCTAAGGCTTTGCTGGATCCCCGCCCCCGAGATCCCAACAGA ACAAAGCAGAGAGGAGAACTTAATCCCGTATTCTCCAGATGTACAGATACACGCAGAGCGATTCATCAACTATAA CCAGACAGTTTCTCGAATGCGAGGTATCTACACAGCTCCCTCGGGTCTGGAGTCCACTTGTTTGGTTGTGGCCTA TGGTTTGGACATTTACCAAACTCGAGTCTACCCATCCAAGCAGTTTGACGTTCTGAAGGATGACTATGACTACGT GTTAATCAGCAGCGTCCTCTTTGGCCTGGTTTTTGCCACCATGATCACTAAGAGACTGGCACAGGTGAAGCTCCT GAATCGGGCCTGGCGA<u>TAA</u>AGAACAAAGACTGTGCCTAAAAGTGGAGAGCCAGGGGAGTGTGGGTCAGATAAGCA TCTCAGCTGACACTCTCAGAGATTCCTGATGGGCTTTCTCTTGAAGTCCAAAGGCGTCTGCATTGTTTCCTTTCT TGACTTTACTTTGCCTTTTGTGTTTTCTCAATTTTATCTAGAAATCTTTCTGACTTTTTCCATCTCTTGCTTCAAA GTAAGAGGGGAACTCTCCTTGCCGACTCCACCTTATAGGTACATTTGGTGTTTTTGCACTGGGAAGAAATAGGATC CATCCTTAGCTGAGGCTTGAGGACTGATCCAGCCTCTCATGGCTTCCCTCCAAAGTAACTTAGGGTTGAGGGATC TATATGTGATGTCAAAACTTACTTTAAACCTCTAGTTTCGTGCTGTCATTTATTAGGCTGGGCCACCAAATCTTT GTGTGAGTTGGGGCCTTTTAAAAACTACTGAATTGTCTGAGCCTTGAAGACATTTCCAGGGAGAAGAGATAATCT

FIGURE 977B

TTAGTTTTTAATATAAATTAACATGTGGGTCATTATATTTCTCCTTAAATGAGGAAATTTTAAATTTTATTGATC TAACCTTTGAAGCTTTAAAAAAGGAGAAAGAGGGTAGGGGTGGGAAACTGGCATACTGTGTATAGCACTGCCG ATTGGCTAGGCCACTGTGTCTCTGCTACAAATTAAAGAAATCCTAAAAGTTTTCCTTGGTCATAGAGTTGGGGAA TGACAGAATTTTTCTTTGTTGTAAATGTATGTACAGAGTAGACCATCTCTAGCCCTGTGGTGAAAGAGGTACAC TCGAATGTTTGCATAAAGCAAGTGACAAATGACACTGTTTAAGTCCTCTTTTGTGTCTTAGAAGATCATTTTGAG GCTATTTTCACATTAGAGGGGATAAAAGCAGTGAAGACATGGAGTAAGTGTATTTTATTTTAGTAAGGAAAGGTC AGTTTAATCATATATGGGTTGGTTAGGTTATCTAAAAATTTGTCATCTTTCTATGGTCATATGCTGATGGTAGAT TATGGCAGAGAAGGAAGAGGAAATGACAACCATTTTATTAATTGTCAGTTTGATATTGAGTGACTGAATGTCTAA GAATCTCCAGAAAAAAACAGGCATCTATCATCCTGACCCAAGGCATATTTTAACATAACCTGGGAGAAGAGAGTT TGGTAGTCTAGTGTTTGTTCTTGTATACAGTGTTTTCTTAAATGAGATGATGCTATTTAATTCTGTTACTTGTTT GTACATGAGATGTTTTTATAAAGGCTCAGCTAATGTATCTTGAATATCATGTATTCATAAAGATGACTGAAATAG TTTCTGGAACAAGTCTGATAGAAAAAATACTCAATTCCTAATTTAAGTGTTAGAGACTTTAATGTAAGCTATCT AATCTGAACTAGTTTCATTATTTGTGTGTGGGTACATGTTATGTGCTCCGTAAGGCATCTTTCAATTTGAAAATT TGCCGGGATTACAGGCATGAGCTACTGCACCTGGCCCATAAATTGTCATACTTTTAAAGAGCCTATTACACAAAG TATCATCAGAATCATCCCAAGACTCATTTCCTGATTCCTAATTATTTAAAATTTTGCTTTTAGGCGAGGCATGGT CCTGGCCAACATGGTGAAACCTGAAACCCCATCTCTACCAAAAAAATGGAAAAATTTAGCCAGGTGTGGTGGTGC ATGCCTGTAATCCCAGCCTCCCGAGTAGCTGGGGCTCAGGCGTGCGCCACCATGCCCGGCTAATTTTTGTATATT TATGGAAATGCCAAGAGATAGTTCAATCTGCCTCTGGCAAGCCATGGACACCAGGTCTGACAAACTCTCTTAC TCCTTAAGACAAATGCTCACCTGATCAATATGGGGAAATAAGCTGCATGGTACCATAATTTCTATTCTAAAAAGGG AAAAGTATCTCTTTGGTATTGCTTTTGGAAAACATTCTTTATAACTATCTTGCTATTTAAAAATTGACAATTATCC TTCCATAATTAAAACAGGTAGACAAC

1068/2682 FIGURE 978

AMLLHGQDVITVSNGGRIMRSWETNIGGLNWEITLDSGSFQALGLVGLQESVRYIAVLKKTTLALHHLSSGHLKW VEHLPESDSIHYQMVYSYGSGVVWALGVVPFSHVNIVKFNVEDGEIVQQVRVSTPWLQHLSGACGVVDEAVLVCP DPSSRSLQTLALETEWELRQIPLQSLDLEFGSGFQPRVLPTQPNPVDASRAQFFLHLSPSHYALLQYHYGTLSLL KNFPQTALVSFATTGEKTVAAVMACRNEVQKSSSSEDGSMGSFSEKSSSKDSLACFNQTYTINLYLVETGRRLLD TTITFSLEQSGTRPERLYIQVFLKKDDSVGYRALVQTEDHLLLFLQQLAGKVVLWSREESLAEVVCLEMVDLPLT GAQAELEGEFGKKADGLLGMFLKRLSSQLILLQAWTSHLWKMFYDARKPRSQIKNEINIDTLARDEFNLQKMMVM VTASGKLFGIESSSGTILWKQYLPNVKPDSSFKLMVQRTTAHFPHPPQCTLLVKDKESGMSSLYVFNPIFGKWSQ VAPPVLKRPILQSLLLPVMDQDYAKVLLLIDDEYKVTAFPATRNVLRQLHELAPSIFFYLVDAEQGRLCGYRLRK DLTTELSWELTIPPEVQRIVKVKGKRSSEHVHSQGRVMGDRSVLYKSLNPNLLAVVTESTDAHHERTFIGIFLID GVTGRIIHSSVQKKAKGPVHIVHSENWVVYQYWNTKARRNEFTVLELYEGTEQYNATAFSSLDRPQLPQVLQQSY IFPSSISAMEATITERGITSRHLLIGLPSGAILSLPKALLDPRRPEIPTEQSREENLIPYSPDVQIHAERFINYN QTVSRMRGIYTAPSGLESTCLVVAYGLDIYQTRVYPSKQFDVLKDDYDYVLISSVLFGLVFATMITKRLAQVKLL NRAWR

1069/2682 FIGURE 979

1070/2682 FIGURE 980

 ${\tt MGSSVLPFCVCVTSPSLGGRCIQGRFASHSKFWGFGRKTASFGAVGETPPDQEPQKETEPATSSHARPWARVIGL}\\ RIWPQPN$

1071/2682 FIGURE 981

1072/2682 FIGURE 982

AGCGGGCTGGGTGCGCGGCGACTGCGACGGGCAGTGGCAGTCATCGCGGCTCAGTGCGTGAGGTTGGCGCG GCGCAGTCTTCCTGCTTTGGCGTTGTCTCTCAGGCCATCTCCCCGGTTGTTGTGCACAGCCACGAAACAAAAGAA CAGTGGCCAGAACCTGGAAGAGGCATGGGTCAGAGTGAACAGAAGGCAGATCCTCCTGCTACAGAGAAGACCCT CCTGGAAGAAGATCAAGTTGGAGGAACAGCTGAAGGAGACTGTGGAAAAATATAAACGAGCTTTGGCAGACAC TGAGAACTTACGGCAGAGGCCAGAAATTGGTGGAGGAGGCAAAATTATACGGCATTCAAGCCTTCTGCAAGGA CTTGTTGGAGGTGGCAGACGTTCTGGAGAAGGCAACACAGTGTGTTCCAAAAGAAGAAATTAAAGACGATAACCC TCACCTGAAGAACCTCTATGAGGGGCTGGTCATGACTGAAGTCCAGATCCAGAAGGTGTTCACAAAGCATGGCTT GCTCAAGTTGAACCCTGTCGGAGCCAAGTTCGACCCTTATGAACATGAGGCCTTGTTCCACACACCGGTTGAGGG GAAGGAGCCAGGCACAGTGGCCCTAGTTAGCAAAGTGGGGTACAAGCTGCATGGGCGCACTCTGAGACCCGCCCT ${\tt GGTGGGGGTGGTGAAGGAAGCT}$ ${\tt TAGCTGTTGATGGGGTGGGTGTTTTTAAACTCACTTGATGTAACTCTCAA}$ GGCTGGTTCATTGTTTCTCATCTATGAGTACGTGTGACCTTTTCCCAAACCTTATTGGAAACCTTAAGTAACCAG TGGCTAAACAGAAAAGCCGGTTGCCCAACTGCATTAATGAACTCTAATTCGGGAGTCTGTTCCCTTTTAGTGCCA GTGTCTGCTCAGACTCTGCTGACACCAAAGTATTTTAAACAAATAAAAGGTCTTGGGGAATTCTGTTTGGCTACC TGGGCACGCCAGTCTGCACCATGTGTCCCTGCGGCGCATGAGTGACTGGCGTATTTAGCCCGTCACATTTCATTC TCGTTTGTCTTCAGTCAACAGCGGCTGAAACTGACCACTGAGAAATGGGTGTGGGCACTGACAGTTCTCCCCCAT TATTTGGCCAGGAATTGAGCTTGGCTTGGCAAAGTTCCTTTTACCCTGTTCTGTTCATCTAAATGCAGACATATT TAAATCATATTCAACTAGTTACTAATGACCTCAAGTTGTATTCCCTGGCAAAATGGACTTTCTCAAAATAGGACT TTTTCCTACAAAAAAAAAAAAAAA

1073/2682 FIGURE 983

MAAQCVRLARRSLPALALSLRPSPRLLCTATKQKNSGQNLEEDMGQSEQKADPPATEKTLLEEKVKLEEQLKETV EKYKRALADTENLRQRSQKLVEEAKLYGIQAFCKDLLEVADVLEKATQCVPKEEIKDDNPHLKNLYEGLVMTEVQ IQKVFTKHGLLKLNPVGAKFDPYEHEALFHTPVEGKEPGTVALVSKVGYKLHGRTLRPALVGVVKEA

1074/2682 FIGURE 984

GGGGGAGAGGGGGCTCAAGGCGAGCGCGCGGGCAGTTGCGGGCGCGTGGCTGAGGTTGGCGGCGGTGCCGC GCGCCCGACGGGCCGGTGGTTGCCGGGGCCTCCCGCCTCGACCCGGGCTGGGGGCAGCCGTGGCGGCCGCCGGGGA CCGCAAGGGGCGGAGGAAAGGAGGGGCCCGTCCCGGCACGCAGAGAGCAGCCGACCATGCCCCGAGACAACAT GGCCTCCTTGATCCAACGGATCGCCCGCCAGGCTTGCCTCACCTTCCGGGGCAGCTGGGGCGGCGGCGCGCTTC $\tt CGATCGCGACGCGGCTTCTGGCGCGGGGGGCGCCGATCCAGGCCGGGCTTCCCCGAGAACCTGAGCAAGCTGAAGAG$ CCTCCTGACCCAGCTCCGCGCGAGGACTTGAACATCGCCCCGCGCAAGGCCACACTGCAGCCGCTGCCGCCCAA CACGTCCATCCCGCTGCACGACCACCCGGGCATGCACGGCATGCTCAAGGTGCTGTACGGCACCGTGCGCATCAG CTGCATGGACAAGCTAGACGCGGGGGGGGCAACGGCCGCGGGCCTTGCCGCCCGAGCAGCAGTTCGAGCCGCC GCTGCAGCCCGGGAGCGAGAAGCCGTGCGGCCGGGCGTGCTGCGTTCGCGGGCCGAGTACACCGAGGCCAGCGG CCCCTGCATCCTCACCCGCACCGGGACAACCTGCACCAGATCGACGCCGTGGAAGGGCCTGCCGCCTTCCTGGA CAAGGAGGCCTCCAGCTCGGCCTGTGACCTGCCTCGAGAGGTGTGGCTCCTGGAGACCCCACAGGCCGATGACTT CTGGTGCGAGGGAGAACCCTATCCAGGTCCCAAGGTCTTCCCT<u>TGA</u>AGCCACTGGCGCCCAGGAGCGGTGGGCCG AAGACGTGCCCTACCCTACCACAAGGGCTGTGTCTCTACCCCCTAGCCTGGGCGTTGGATCTACTGGAATGAGCA GCAGCCGCTTCCTCGGCAGCCTTGGGAAGCACGGGCGACTGGACAGCAGCCGCCGGGCACGGTTATGGGGGCGGG GTGGGCGGGGAGGCTAGATTGTTTCCTGGTACTGTCACTGCCACTGGGGCTTTGATTTGGAGGAATGGGGCAGGG AAGTGGTTTTCTTGCTCCCACTCCCTACCCCTTAGTTAAATAGGGTTTATTTTCCACTCATGCCCTTATGCCTTT TTTTCTTATAGTTTTTTAACTTATTGACTGTGCATGACCCAGTGGTTTGAATTGTTTTTAGTTCAAGTCATTGGT CCTTTGCCCAGTAGCCACATCTGGTTTACTCAGGCAGCATCTACTAAGAAATTCAGCACCTGCATATCTCTGTGA CATGGTCACTTAGAGCTTATCTTCCCTATGAATCTCCAGATCTGTAGAGTCGAGCAGATTTCATGTTGCAGATTCA AATTCTGTATTTTCTAACGGGAAGATTCAAAGGAGCTGAATGTGTTATGCTTCCAAACAACTGAATGTAAAACAC TCCTAGCCAGTTGTTGCATTCCCTATATTTATTTACTTCCAATATTTTACTGTAAAAGTAGGGAGAAATATTATG TTGATAGTTGTTTCATATTCTCTCAGGAACTTTAATGTTCCCGACTCGGGTGATTCCAGCTGTGTTGCTGGCAGT GTTGTCTCAACCCTCTCCCTAAAATGACTGAGCCCTGGGTTCATCTAATGTGGTTTTCCTTAGGAAGAGATAGAA GGCACAGAAGATCACAGCTAGAGAATTGAGAATTAACTATACTACTAGCCATTTTAGGGCACCAAAACTTGGGAT TAAACACTTCCTACTTCCCACTCCCAACTCCTGAAATGAAGTCTTGCTATCTGTGACTAGTTTTATTTTTGTGCT TTTAATAGTCCGAGCAGTCTTACCTTGTTTACACATGTATTGACACCATTTGCTTCAGGCCATGGAGCACTGTTT CTCCCTTTTTTACTATTTATAGGATTCCGTTTTTTCACAAGACTTTTAATAAAAAGAAATTGTAGAAATAAACAC

1075/2682 FIGURE 985

 $\label{total} \begin{matrix} MQPGFPENLSKLKSLLTQLRAEDLNIAPRKATLQPLPPNLPPVTYMHIYETDGFSLGVFLLKSGTSIPLHDHPGM\\ HGMLKVLYGTVRISCMDKLDAGGGQRPRALPPEQQFEPPLQPREREAVRPGVLRSRAEYTEASGPCILTPHRDNL\\ HQIDAVEGPAAFLDILAPPYDPDDGRDCHYYRVLEPVRPKEASSSACDLPREVWLLETPQADDFWCEGEPYPGPK\\ VFP\\ \end{matrix}$

1076/2682 FIGURE 986

CCCTCTTCCGTGTGGGCCCTCCCTGTCCCCTCTCTGTCACCTCACAGTAGTCGTTGCCGGTAGCGGGTGTGGGGG ${\tt CGGGTCCCAATGGAGCCGCCGAATCTCTATCCGG}{\tt TGA}{\tt AGCTCTACGTGTACGACCTGTCCAAAGGCCTGGCCCGG}$ CGGCTCAGCCCCATCATGCTGGGGAAACAACTGGAAGGCATCTGGCACACATCCATAGTTGTGCACAAGGATGAG GATGTGGGGAGTACAGAAGTCACAGAAGAAATCTTTCTGGAGTACCTCTCCTCGCTGGGGGAGTCCCTGTTCCGA GGTGAGGCCTACAACCTCTTTGAACACAATTGTAACACCTTCAGCAACGAAGTGGCACAGTTCCTGACTGGGCGG AAGATTCCTTCTTACATCACAGACCTGCCCTCTGAAGTTCTCTCCACGCCCTTTGGACAGGCACTTCGGCCCCTC CTGGACTCCATTCAGATCCAGCCTCCAGGAGGGAGCTCCGTGGGCAGACCCAACGGCCAGAGCTAACAGGACTGC TTACATCAGAGCTAACAACCAGGGGACGGCTTTTTAAATTTCCCAGGGAAGGAGACCGTCAGGCCGCATGTAGAC AATGCTGCTAAGAAACAGAACAAAATGCCACCCCTTCTAATAGTATTATACTAATTTATTAAGGCTGTCTTGTCT GCGAGTCACAGTTTGCGGGAGCCCCAACCTAGAACTCTTTCCAGAGAACACTCACGCTCTACCCCAAGTTGCCAAC ACCTGTGGGACCCAGGTGAGTTTTAGAACATCCGTGACCCAGAAAGTTACTCTAGTGTTAAATGAACCAAAGGAT TTGGTGTACATGGGACCGGTTTCAGGATGACTAACCTAACCTAAGTGAACTCTTTAGCCACAACCCTCACCTTCC CCGGAGAAAACAGGATAAAGCCATTCCTCCTTCCACCTAGATGGATTGCCAATCTTCTGCCATCAATTTTGGGAA ACCTGCCTTTGTGCCCCCGAGGCTGCCTTTCCTCAGCATAGCTGACTTGTCATAGTGGATGAGGTCTGGGCTGGA GCAGTAGAAGCCAAGGCCTTTTTTCTGCAAGTAATGATGTTAGGTTATTTGCAGTCTCTGTAACCACCATCCAGGC CAGTACGCAGTATTTAGCTGGGGACCAAGGGATGGGATTCCCTACTCTAAGAAAATACCTTTATTTTAATTATTA TTATTTTTTGAGACGGAGTCTCGCTCTACCACCCAGGCTGGTGTGCAGTGGCATGATCCCGGGAGGCAGAGATTG TGAAGTGGAATCAAGGTGGCAAGAAAATTTAGAATCGTTTCTGATAGGGACTTTCCCTTATCCTAAATGTGTTTT GAAGGCACACGTTATTTCCATTGTCATTCTGACTTTAGAAAGGCAGGTTGGGGCATGAGTGGGCATTTTCCTAAT GACTTGCTGCTAGGAGGTTATAGGCAGGGAACAGTCTGGGAGTCTCTAATCCAGAGAGACTTTCAGATTCCCTCT CTTCACATGAACCTCCATTAGTTAGATTTTGGGAAAGTGAGCATGAAGAAGGGACTCAGAGCTGCCAGGTACCCG AGTCTCAGGTCTGACATCCTTGGGCCCCTTCTGCCACAACTTCTTGCCACTTCACGGACTTGAATTATGTTGCTT CTTCCTGGAAGTCTGGCCTGCAGCACAGGCCTTTCCTCCAAAAAGCTGCTGCTCATTTCTGGCCCCATCTGCT GCTATCTTTGCCATCAGCCATCACAGTTTGGCATCATCAGAGTCTCAGCTAGAGGAGCTGTCATTCTGCCTTAGT GTTTGCCTGCGACCTGACCAGGGGCATGACCAGCTGGGATGTCAAGTGACATTTGGGAACTTGTAGAGGCCAAAT GATTGAAAGTTTAATTCTTCTCAAGACCCACTGATTTGCCAGTGTGCATGGAAATAATAGATTAGAGCAGAAACT CTTCTGGGAGGGTAGCAGGTTGGTCTTGGCCAGTGTTTCCCACCAGTGTTGTTCCCTTTTCCAGCTTGCC GGCATCACAGCTCCTTTTTTTTCCTTTTCTCTCTTCCAGATCCAGTTTCAGCTGGTTTGCTTCTTCCAGCAGGCA CCCTTAGGCCCAGGAGCAGCTCCCCTGAGAGAATTTGAGTCACTCATTTCCTTGAACAGCACCCCCCTTTATACT AGCAGCCATTTGTGCCATTGCCTGTGCCCTAGGGTTTGTGGGGAAGAGGCGAGGGATCACTGAGCAGTTTTCCCA GAGCTCCATGGGAAGGCAAGCTCTCCCTCCCAATGGGAGCCCCACTGTCACTAACTGTAAACTCAGGCTCAGGCT TCAACTGCCTACCCCCATCCTCATATTTCTGTCTGTCCCAGCACCTCAGGAGCATTCTCATTGTGGCCGGCTAAC TCCGCCTGGATGTGAACAGGCAAGCACAGTGGGAAATGAGTCACGTACTTGTATTGCACAGTGGACACCTCTAGA GGTCCATTGGTTTAAAGGGATAGGGAAGGAGGAGGAGGATGAGACCATCACCCCCTCCCAGAAGTAAATCTAGTATC TGAGTTTTCTTTATGCCCTTGAGTCAAACTAATAACTGTCTAGTACGGAGGTGTTTGCTGGTTTTCTTCGGTGTT TTTTCTAATGCAATAAACTCATTTCTGCCTGCTCG

1077/2682 FIGURE 987

 ${\tt PLPCGPSLSPLCHLTVVVAGSGCGGASSAGRPLPHPYSPGPGSVPPSPSASHSRRVREGPSRCRVPEGRRGRRRH GSQWSRRISIR}$

1078/2682 FIGURE 988

ACTCAATGTTAGTAAGCTTGCCAGCAAAGCACGGACAGAGAAGGAGGAGAAGCTGAGCCAGGCCTATGCAATCAG TGCTGGTGTCTCTCTAGAGGGCCAGCAGCTCTTCCAGACCATTCACAAGACCATTAAAGACTGTAAATGGCAAGA AAAAAACATCGTAGTCATGGAAGAAGTTGTTATTACACCCCCATATCAAGTGGAAAACTGTAAAGGCAAAGAGGG GAGTGCACTGAGCCATGTACGCAAAATAGTTGAAAAACATTTTAGAGACGTGGAAAGCCAAAAGATACTGCAACG TTCACAAGCCCAGCAACCACAGAAGGAGGCTGCCCTGTCATCCTGAGTCCGTACACATGGAGGACTCTTCCAGCA AATAATTTAAAAGTTGAATCATTACTTGACTAACAGACTTCGGTCCACCATGTCCTTTTCACAGCCCTCTTCTGG AACAGTCACCTTGTTAATTTTATTTTTGAAAATTATTTTCCCACTCTGCCCTTTACTTCTGACTTTCCTTACTA TTCTTCCAAAATAAAAGTAACAAGCTGACTGTGATTCTTAAATTGAGACCAGAGCAGCAAACGTCTCACTTTAAA TTCTTAACTTTAAATATATATATGAAAATATATATAAAATGTTCTCTAAATATTTTCTGCTTCTTGCAGGTCTC TTTTTACTAGATCATGGCTGTTCTTCCCACCTCATCCCTCTGAAAATAAAAATGTATTGCCCTCCCCACCATCCA TCATAGCCAGGCCACTAACTTGACTTGGTGCAAGAGATTCTTGCTGCGAACTTTGTAGAGCCAGTGTGCAGATAG CTCAGGATTCTCCCTCTGCCTGTCTTACTTCATGGTACTAGAAGACCTTCCTCGCCACTCTCTCCACATGAGAGA GTCAGCTGCCCTTTCTCCTGTGCCTCTGCAGGAAGAACTCTCTTGCATGGCACATCTCAGCTCCTCATTGAGGGA TAGTTTTCTTTGATAAGAAACCTGGAGTCCATTTACTCTGACCTCTTTTAAATCTATATCCAGAGCCACTAGCC CAGGAAAAACTTGGGTGACCCGTAATTTCTCTTCTCCTGCTGTCCTTTTGCTCTTACGCCCCACCCCAACTCCCC TTAAATTTTACAGGCTTATGACAGTTTGTATGTGCTCAGCCAATGAGCAGAAAACCTGGAAAGAATTTCTGGACT TTAGCCCACCAGTTTGTCTGGTTGACTAACCTGCTGAGAGCTAAAATTGGCACCCATTGCCCCGTGCCTTCAGGC AGTCTCCTGGGGCAGAGTATGCCACCATCCGAATATCAGGCACTGAGTGGGATGTGGGTGATGCTCACATGACTG

1079/2682 FIGURE 989A

TTGCTGCGTCAACTGTGTTCCCTTTGGCCTGGCTGAGTTTGATACTGTGGGGGATTCAGTTTAGGCGCTGGCCCGA CATTCTCTCCTGGCGGCGCCCCCCTGCAGTAGCGTTCGCCCGAACATGGCGACACGGAGCAGCAGGAGGAGGAGT TGCACGGCGGCAGCGCCCTTGCCCCAGGACCGGGGCTTCCTCGTGGTGCAGGGCGACCCGCGCGAGCTGCGGC TGCAGCCCGAGCCCATCAAGGTGTACGGACAGGTTAGTCTGAATGATTCCCACAATCAGATGGTGGTGCACTGGG CTGGAGAGAAAAGCAACGTGATCGTGGCCTTGGCCCGAGATAGCCTGGCATTGGCGAGGCCCAAGAGCAGTGATG TGTACGTGTCTTACGACTATGGAAAATCATTCAAGAAAATTTCAGACAAGTTAAACTTTGGCTTGGGAAATAGGA GTGAAGCTGTTATCGCCCAGTTCTACCACAGCCCTGCGGACAACAAGCGGTACATCTTTGCAGACGCTTATGCCC AGTACCTCTGGATCACGTTTGACTTCTGCAACACTCTTCAAGGCTTTTCCATCCCATTTCGGGCAGCTGATCTCC TCCTACACAGTAAGGCCTCCAACCTTCTCTTGGGCTTTGACAGGTCCCACCCCAACAAGCAGCTGTGGAAGTCAG ATGACTTTGGCCAGACCTGGATCATGATTCAGGAACATGTCAAGTCCTTTTCTTGGGGAATTGATCCCTATGACA AACCAAATACCATCTACATTGAACGACACGAACCCTCTGGCTACTCCACTGTCTTCCGAAGTACAGATTTCTTCC AGTCCCGGGAAAACCAGGAAGTGATCCTTGAGGAAGTGAGAGATTTTCAGCTTCGGGACAAGTACATGTTTGCTA CAAAGGTGGTGCATCTCTTGGGCAGTGAACAGCAGTCTTCTGTCCAGCTCTGGGTCTCCTTTGGCCGGAAGCCCA TGAGAGCAGCCCAGTTTGTCACAAGACATCCTATTAATGAATATTACATCGCAGATGCCTCCGAGGACCAGGTGT TTGTGTGTGTCAGCCACAGTAACAACCGCACCAATTTATACATCTCAGAGGCAGAGGGGCTGAAGTTCTCCCTGT CCTTGGAGAACGTGCTCTATTACAGCCCAGGAGGGGCCGGCAGTGACACCTTGGTGAGGTATTTTGCAAATGAAC CATTTGCTGACTTCCACCGAGTGGAAGGATTGCAAGGAGTCTACATTGCTACTCTGATTAATGGTTCTATGAATG AGGAGAACATGAGATCGGTCATCACCTTTGACAAAGGGGGAACCTGGGAGTTTCTTCAGGCTTCAGCCTTCACGG TCAACCTCCAGCTCCGGAGAATGCCCATCCTGTCCAAGGAGTCGGCTCCAGGCCTCATCATCGCCACTGGCTCAG TGGGAAAGAACTTGGCTAGCAAGACAAACGTGTACATCTCTAGCAGTGCTGGAGCCAGGTGGCGAGAGGCACTTC CTGGACCTCACTACTACACATGGGGAGACCACGGCGGAATCATCACGGCCATTGCCCAGGGCATGGAAACCAACG AGCTAAAATACAGTACCAATGAAGGGGAGACCTGGAAAACATTCATCTTCTCTGAGAAGCCAGTGTTTGTGTATG GCCTCCTCACAGAACCTGGGGAGAAGAGCACTGTCTTCACCATCTTTGGCTCGAACAAAGAGAATGTCCACAGCT GGCTGATCCTCCAGGTCAATGCCACGGATGCCTTGGGAGTTCCCTGCACAGAGAATGACTACAAGCTGTGGTCAC CATCTGATGAGCGGGGGAATGAGTGTTTGCTGGGACACAAGACTGTTTTCAAACGGCGGACCCCCATGCCACAT GCTTCAATGGAGAGGACTTTGACAGGCCGGTGGTCGTGTCCAACTGCTCCTGCACCCGGGAGGACTATGAGTGTG ACTTCGGTTTCAAGATGAGTGAAGATTTGTCATTAGAGGTTTGTGTTCCAGATCCGGAATTTTCTGGAAAGTCAT ACTCCCCTCCTGTGCCTTGCCCTGTGGGTTCTACTTACAGGAGAACGAGAGGCTACCGGAAGATTTCTGGGGACA CTTGTAGCGGAGGAGATGTTGAAGCGCGACTGGAAGGAGAGCTGGTCCCCTGTCCCCTGGCAGAAGAAGAACGAGT TCATTCTGTATGCTGTGAGGAAATCCATCTACCGCTATGACCTGGCCTCGGGAGCCACCGAGCAGTTGCCTCTCA $\tt CCGGGCTACGGGCAGCAGTGGCCCTGGACTTTGACTATGAGCACAACTGTTTGTATTGGTCCGACCTGGCCTTGG$ ACGTCATCCAGCGCCTCTGTTTGAATGGAAGCACAGGGCAAGAGGTGATCATCAATTCTGGCCTGGAGACAGTAG AAGCTTTGGCTTTTGAACCCCTCAGCCAGCTGCTTTACTGGGTAGATGCAGGCTTCAAAAAAGATTGAGGTAGCTA ATCCAGATGGCGACTTCCGACTCACAATCGTCAATTCCTCTGTGCTTGATCGTCCCAGGGCTCTGGTCCTCGTGC CTGCTGCCTATCACCTGGTGTCTGAGGATGTGAAGTGGCCCAATGGCATCTCTGTGGACGACCAGTGGATTTACT GGACGGATGCCTACCTGGAGTGCATAGAGCGGATCACGTTCAGTGGCCAGCAGCGCTCTGTCATTCTGGACAACC TCCCGCACCCCTATGCCATTGCTGTCTTTAAGAATGAAATCTACTGGGATGACTGGTCACAGCTCAGCATATTCC GAGCTTCCAAATACAGTGGGTCCCAGATGGAGATTCTGGCAAACCAGCTCACGGGGCTCATGGACATGAAGATTT TCTACAAGGGGAAGAACACTGGAAGCAATGCCTGTGTGCCCAGGCCATGCAGCCTGCTGTGCCCAAGGCCA ACAACAGTAGAAGCTGCAGGTGTCCAGAGGATGTGTCCAGCAGTGTGCTTCCATCAGGGGACCTGATGTGTGACT GCCCTCAGGGCTATCAGCTCAAGAACAATACCTGTGTCAAAGAAGAAGAACACCTGTCTTCGCAACCAGTATCGCT GCAGCAACGGGAACTGTATCAACAGCATTTGGTGGTGTGACTTTGACAACGACTGTGGAGACATGAGCGATGAGA GAAACTGCCCTACCACCATCTGTGACCTGGACACCCAGTTTCGTTGCCAGGAGTCTGGGACTTGTATCCCACTGT

FIGURE 989B

CCTATAAATGTGACCTTGAGGATGACTGTGGAGACAACAGTGATGAAAGTCATTGTGAAATGCACCAGTGCCGGA GTGACGAGTACAACTGCAGTTCCGGCATGTGCATCCGCTCCTCGGGTATGTGACGGGGACAACGACTGCAGGG ACTGGTCTGATGAAGCCAACTGTACCGCCATCTATCACACCTGTGAGGCCTCCAACTTCCAGTGCCGAAACGGGC ACTGCATCCCCCAGCGGTGGGCGTGTGACGGGGATACGGACTGCCAGGATGGTTCCGATGAGGATCCAGTCAACT GTGAGAAGAAGTGCAATGGATTCCGCTGCCCAAACGGCACTTGCATCCCATCCAGCAAACATTGTGATGGTCTGC GTGATTGCTCTGATGGCTCCGATGAACAGCACTGCGAGCCCCTCTGTACGCACTTCATGGACTTTGTGTAAGA ACCGCCAGCAGTGCCTGTTCCACTCCATGGTCTGTGACGGAATCATCCAGTGCCGCGACGGGTCCGATGAGGATG CGGCGTTTGCAGGATGCTCCCAAGATCCTGAGTTCCACAAGGTATGTGATGAGTTCGGTTTCCAGTGTCAGAATG AAAACCCCACAGAAGCCCCAAACTGCTCCCGCTACTTCCAGTTTCGGTGTGAGAATGGCCACTGCATCCCCAACA GATGGAAATGTGACAGGGAGAACGACTGTGGGGACTGGTCTGATGAGAAGGATTGTGGAGATTCACATATTCTTC CCTTCTCGACTCCTGGGCCCTCCACGTGTCTGCCCAATTACTACCGCTGCAGCAGTGGGACCTGCGTGATGGACA CTGCTGCCTCCACTCCACCCAACTTGGGCGATGTGACCGATTTGAGTTCGAATGCCACCCAACCGAAGACGTGTA GCACCTTGACTTGCATGAGCAGGGAGTTCCAGTGCGAGGACGGGGAGGCCTGCATTGTGCTCTCGGAGCGCTGCG ACGGCTTCCTGGACTGCTCGGACGAGAGCGATGAAAAGGCCTGCAGTGATGAGTTGACTGTTACAAAGTACAGA ATCTTCAGTGGACAGCTGACTTCTCTGGGGATGTGACTTTGACCTGGATGAGGCCCAAAAAAATGCCCTCTGCAT CTTGTGTATATAATGTCTACTACAGGGTGGTTGGAGAGAGCATATGGAAGACTCTGGAGACCCACAGCAATAAGA CAAACACTGTATTAAAAGTCTTGAAACCAGATACCACGTATCAGGTTAAAGTACAGGTTCAGTGTCTCAGCAAGG CACACAACACCAATGACTTTGTGACCCTGAGGACCCCAGAGGGATTGCCAGATGCCCCTCGAAATCTCCAGCTGT CACTCCCCAGGGAAGCAGAAGGTGTGATTGTAGGCCACTGGGCTCCTCCCATCCACACCCATGGCCTCATCCGTG AGTACATTGTAGAATACAGCAGGAGTGGTTCCAAGATGTGGGCCTCCCAGAGGGCTGCTAGTAACTTTACAGAAA TCAAGAACTTATTGGTCAACACTCTATACACCGTCAGAGTGGCTGCGTGACTAGTCGTGGAATAGGAAACTGGA GCGATTCTAAATCCATTACCACCATAAAAGGAAAAGTGATCCCACCACCAGATATCCACATTGACAGCTATGGTG AAAATTATCTAAGCTTCACCCTGACCATGGAGAGTGATATCAAGGTGAATGGCTATGTGGTGAACCTTTTCTGGG CATTTGACACCCACAAGCAAGAGAGAGAAACTTTGAACTTCCGAGGAAGCATATTGTCACACAAAGTTGGCAATC ATGTTATGACCAGAGGGGTTCGCCCACCTGCACCTAGCCTCAAGGCCAAAGCCATCAACCAGACTGCAGTGGAAT GTACCTGGACCGGCCCCCGGAATGTGGTTTATGGTATTTTCTATGCCACGTCCTTTCTTGACCTCTATCGCAACC ${\tt CGAAGAGCTTGACTTCACTCCACAACAAGACGGTCATTGTCAGTAAGGATGAGCAGTATTTGTTTCTGGTCC}$ GTGTAGTGGTACCCTACCAGGGGCCATCCTCTGACTACGTTGTAGTGAAGATGATCCCGGACAGCAGGCTTCCAC CCCGTCACCTGCATGTGGTTCATACGGGCAAAACCTCCGTGGTCATCAAGTGGGAATCACCGTATGACTCTCCTG GTAACAGCACTGTGGAATACACCCTTAACAAGTTGGAGCCTGGCGGGAAATACCACATCATTGTCCAACTGGGGA ACATGAGCAAAGATTCCAGCATAAAAATTACCACAGTTTCATTATCAGCACCTGATGCCTTAAAAATCATAACAG **AAAATGATCATGTTCTTCTTGTTTTGGAAAAGCCTGGCTTTAAAGGAAAAGCATTTTAATGAAAGCAGGGGCTATG** AGATACACATGTTTGATAGTGCCATGAATATCACAGCTTACCTTGGGAATACTACTGACAATTTCTTTAAAATTT AGCCTGCCATCCTGCTGTACGATGAGCTGGGGTCTGGTGCAGATGCATCTGCAACGCAGGCTGCCAGATCTACGG ATGTTGCTGCTGTGGTGGTGCCCATCTTATTCCTGATACTGCTGAGCCTGGGGGTGGGGTTTGCCATCCTGTACA CGAAGCACCGGAGGCTGCAGAGCATCCACCGCCTTCGCCAACAGCCACTACAGCTCCAGGCTGGGGTCCGCAA TCTTCTCCTCTGGGGATGACCTGGGGGAAGATGATGAAGATGCCCCTATGATAACTGGATTTTCAGATGACGTCC ${\tt CCATGGTGATAGCC} \underline{{\tt TGA}}{\tt AAGAGCTTTCCTCACTAGAAAACCAAATGGTGTAAATATTTTATTTGATAAAGATAGTT$ NNNNNNNNNNNNNNNNNNNNGGAATGAATAAACTTTGTAGTAATCAACTGTGAACTTCAAACCAGGTTGATTTTA GAGATAATTTCGGTTCAGTAAATTGGCCAATCTTTTTATTTTTCTAAGACACAGAAATGTATTTAATAAAAACCT

1081/2682 FIGURE 989C

AGGAAAGTGTGTGGATGTATTATGGCGGAAGGTTTCTTTATGTTATTTTTGTTAATTTATTGGGACTCTGTGTAAG GCCAGGCTTTAGTGGTCATTAGACACCACATGTGTTATGAGCCCCTTACCCATAGGGTTGGGGGTGGGAAGAGAA GCATATTTTTTTGCCATTCCGGAAGCAATCCATTTTTATTCACTTGTGTGTCATGTAATGGTCTTTGGCAGGAGA GAGCACTGAGTCATTGCTGGAGTTCAGTTCAACAGAGCTGCAGCTTGGGAAGCCCTGTAAGCCCACAGCTTCCTC TCTTATATTAATTGATGGAATTTTACTGTATGTGCCTCTGTACAAGATGTAGCTTTGAGAGCTACAAAATGATAA CACTGCTTTATTACACACTGGTTTCATTGTCATTGCAAAAACTTACCCTGGTTGTGGGGGAGAGTTCTAGATCTG AGGATCTCAGATGTAAAATTATGTATTTGGTTTGAGATGGCCACTTATTGTCCTTAAAAATCCATACTGATATAT CCCAATCTAAAGAGACAGTGCTGTACATTCTCATAGAGATAGAGAAGATCTAAAAAGTTGAGACTACTCAATCCA GTTAACAACAGCAGGAGCACTAGAGTTTGTTCATTTATTCTCTCTGTAAAACAAGCTGTGCTTTTTTTCTTCTGC CTTTAAAATGCCACCCGTGTATTCAAACCATGGCCACTTGATACTTATGTAGAATCCATCGTGGGCTGATGCAAG CCCTTTATTTAGGCTTAGTGTTGTGGGCACCAATGTCGAGCATCGTTGTGACTTGTGCTGTATGATTCTCACTGA AGAATTTCCTTTCAGCCAAGAAGCAGTGAGGTCTGGGAATATTCCAAAGTCATGTCTCTGAATATGTGTCCTTGA CGTGCAAGCTTTGTAAAACCCCATCCCCGCTTAGGTGCGAGGCATCACCTTCTCACAAGTGTTTAGTTTCTTTTA AATTAAATTTTTTAGTTTTTGAAATTTTTATTTATATGTATACTTAGATGAGTATTTTAAGCTGTCGACCTTTAG TTTGCCATACGGGTAGGACTGTATTTCATGTTAACAACTGGTGGTAATGATAAGCCTTCTTCTAGCGTATTTTCT AGAGATTTGTTCAAAACTCTAAGCCCTACCACCTCCCCTTTAATAAGCTCTTTAAATAGTTGAATCATTAACAAC CTGGTGGGAGGCAAGTCATTTAATTGAACCACTAGGAAGTGTATTTTCTTTTTCTTTTTCTGCCAACTTTTTGGTG GCATTTGTAAAAGCTGATATAAAAGGCTCTGAGATGTTATTTTCAGTTATTCCATAGGCAAGCCTTTTTACAGAG CATATGTCTCCAGTTGGCAGCTTGAGATATTTCCGAGCATCCGGTTCTAGCTACCAGTGCCTCCCAATGCTTAGT TAGGGCTAGAGTATTTTATATAAACAGAAGAGCTAAGTTCCTGAAGACTAAGCTAGATAGCTGCAGCTATATGTA AATTGTATATTTTTATGAACTTTTGAAGCACACACTCCTGTTTCCCTCTGTGTAGCTTTGTGGGGATTTCATGTA TATATGCTGTCTGAAAGAATCCAGAGGTTGGAGTGCCAATAGAAAATGAAAACAAATGCCTTGTACTACAGGCAG TGTACCTTGTTGGAGATGCCACCTCAGAAGTTCACACTGTGCAGGAAAAAGGTTTTATTCTCTCCTGGCATACAT TAGAATGTCAGATGCCTGCATCCATGTGGACCACGATGGGCCTCTAAAAATTGGTGGGCAGGGGGTTTGCTTATG AGTTTTCTCTGGAAACCGATTTTACTCCTGGATGTATTGAATGCCCCTTGAGCTTTATGAGATACGAGTCCACAT GGATAAAATGTTAGAGAGTGGAGTTCTACAGAGGATTCCAGGAAGAGGCCATGTCTGTGCAGTCCTAGTTCCAGA CAGGTGAGAAGCTCCAGGAACTACTGGCTACCTTGACAAGCTGGGTAAATAGTTATCATTCTGGGTAACTGGTTG GACAGAAGACACACAGCTGCCTGTTCTCTCCCTGCCCATCATGTTTGGCCCACTAGATGAAGCTGTACTCAGCAAT TTAGGGAATGTAACCCTTCTCAGAACTGGCCATTTTCAGGGGAAGCTTGGGAGAGCAATAGTATGGTGAGCCCCT TAGAGATGAGCGCCTACTCCTTCTTGGCGAATGCTGCCTTCAGATGCTTACCAAGTGGTCACTGCATCTAGTAAG ATTATATTTCCAGTACACTTCCTTAGGGCAGAAACACCATCCTATCAGGTTTGGTCAGTCCCTTCTTCATGAAGG GAGTCATGGGGAATTCCTGAAAATTTTCTTCCTTCTGCAGACAGTTGGATGAGTCCCTTAGAGAAGGCATCCAGA GACATAACTAAACTGAATATCATCCCATATTGATTTTAGGAATTGACTCTAAAACTCTGTGCAGAATCTTGTGTT GGGATTGTATCTTGACATTCCTGTTGTGTTATTTTTCTTAACTGGAGTGTGCTGCCTTTCAGGTACAATTTTT GAGATATGTACTGCTGGGTACATGGACAGTAAGTGTGTTTTCAGATGGAGTACCAGCACCGAAAATGGGTTGAGG GAGGATGGGTTGTATGTATGTTTCTGCCCACTAATTTTGAGCAGCCATATTATGAATTAAATCGTCACAGCCAAG TAATAACCCAAGAATGGTATGAGTTTCATGTGTAATAGCTCAAATGGAATAAGCATGAATGCTGGAGTGGACCAT TATCCTCAAATATTCTATGTCACTTCTCATTTAAAGACTCTTGTTATGAACTATTAGAAACTTTAGGCAAAATCA AAAGTATTTGCGGCAAAATAAAGGCCTATTCTACTCTTATTTAAAGTGAAACACTGTATACTTGTTTCTCCCAA

1082/2682 FIGURE 989D

AGCGAAATTAAGTATTTATAATTTCAATTGCCTCGATAAGTTTCCAAGTCACTGAAATCTGCTGAAGGTTTTACT GTATTGTTGCACAACTTTAAGATAATTTTTGTCTCAATGTCAACTTTTTTCACTGAATAAAAATTTAACTGGGTC AAGAAAACACCTCTTTGAAAATCCACTGTCTCTGTGTGTCTCCGAGCTGTTCTTTAGAGCGCAATAAAGATGGCTG ACGCAGTCTCCAAACCCC

1083/2682 FIGURE 990

AASTVFPLAWLSLILWGFSLGAGPRISQRWYFGDTCLHLTEPALLASRCTFSPGGGATCSSVRPNMATRSSRRES RLPFLFTLVALLPPGALCEVWTQRLHGGSAPLPQDRGFLVVQGDPRELRLWARGDARGASRADEKPLRRKRSAAL QPEPIKVYGQVSLNDSHNQMVVHWAGEKSNVIVALARDSLALARPKSSDVYVSYDYGKSFKKISDKLNFGLGNRS EAVIAQFYHSPADNKRYIFADAYAQYLWITFDFCNTLQGFSIPFRAADLLLHSKASNLLLGFDRSHPNKQLWKSD DFGQTWIMIQEHVKSFSWGIDPYDKPNTIYIERHEPSGYSTVFRSTDFFQSRENQEVILEEVRDFQLRDKYMFAT KVVHLLGSEQQSSVQLWVSFGRKPMRAAQFVTRHPINEYYIADASEDQVFVCVSHSNNRTNLYISEAEGLKFSLS LENVLYYSPGGAGSDTLVRYFANEPFADFHRVEGLQGVYIATLINGSMNEENMRSVITFDKGGTWEFLQAPAFTG YGEKINCELSQGCSLHLAQRLSQLLNLQLRRMPILSKESAPGLIIATGSVGKNLASKTNVYISSSAGARWREALP GPHYYTWGDHGGIITAIAQGMETNELKYSTNEGETWKTFIFSEKPVFVYGLLTEPGEKSTVFTIFGSNKENVHSW $\verb|Lilqvnatdalgvpctendyklwspsdergnecllghktvfkrrtphatcfngedfdrpvvvsncsctredyecd|$ FGFKMSEDLSLEVCVPDPEFSGKSYSPPVPCPVGSTYRRTRGYRKISGDTCSGGDVEARLEGELVPCPLAEENEF ILYAVRKSIYRYDLASGATEQLPLTGLRAAVALDFDYEHNCLYWSDLALDVIQRLCLNGSTGQEVIINSGLETVE ALAFEPLSQLLYWVDAGFKKIEVANPDGDFRLTIVNSSVLDRPRALVLVPQEGVMFWTDWGDLKPGIYRSNMDGS AAYHLVSEDVKWPNGISVDDQWIYWTDAYLECIERITFSGQQRSVILDNLPHPYAIAVFKNEIYWDDWSQLSIFR ASKYSGSQMEILANQLTGLMDMKIFYKGKNTGSNACVPRPCSLLCLPKANNSRSCRCPEDVSSSVLPSGDLMCDC PQGYQLKNNTCVKEENTCLRNQYRCSNGNCINSIWWCDFDNDCGDMSDERNCPTTICDLDTQFRCQESGTCIPLS YKCDLEDDCGDNSDESHCEMHQCRSDEYNCSSGMCIRSSWVCDGDNDCRDWSDEANCTAIYHTCEASNFQCRNGH CIPQRWACDGDTDCQDGSDEDPVNCEKKCNGFRCPNGTCIPSSKHCDGLRDCSDGSDEQHCEPLCTHFMDFVCKN RQQCLFHSMVCDGIIQCRDGSDEDAAFAGCSQDPEFHKVCDEFGFQCQNGVCISLIWKCDGMDDCGDYSDEANCE NPTEAPNCSRYFQFRCENGHCIPNRWKCDRENDCGDWSDEKDCGDSHILPFSTPGPSTCLPNYYRCSSGTCVMDT WVCDGYRDCADGSDEEACPLLANVTAASTPTQLGRCDRFEFECHQPKTCIPNWKRCDGHQDCQDGRDEANCPTHS TLTCMSREFQCEDGEACIVLSERCDGFLDCSDESDEKACSDELTVYKVQNLQWTADFSGDVTLTWMRPKKMPSAS CVYNVYYRVVGESIWKTLETHSNKTNTVLKVLKPDTTYQVKVQVQCLSKAHNTNDFVTLRTPEGLPDAPRNLQLS LPREAEGVIVGHWAPPIHTHGLIREYIVEYSRSGSKMWASQRAASNFTEIKNLLVNTLYTVRVAAVTSRGIGNWS DSKSITTIKGKVIPPPDIHIDSYGENYLSFTLTMESDIKVNGYVVNLFWAFDTHKQERRTLNFRGSILSHKVGNL TAHTSYEISAWAKTDLGDSPLAFEHVMTRGVRPPAPSLKAKAINQTAVECTWTGPRNVVYGIFYATSFLDLYRNP KSLTTSLHNKTVIVSKDEQYLFLVRVVVPYQGPSSDYVVVKMIPDSRLPPRHLHVVHTGKTSVVIKWESPYDSPD QDLLYAIAVKDLIRKTDRSYKVKSRNSTVEYTLNKLEPGGKYHIIVQLGNMSKDSSIKITTVSLSAPDALKIITE NDHVLLFWKSLALKEKHFNESRGYEIHMFDSAMNITAYLGNTTDNFFKISNLKMGHNYTFTVQARCLFGNQICGE PAILLYDELGSGADASATQAARSTDVAAVVVPILFLILLSLGVGFAILYTKHRRLQSSFTAFANSHYSSRLGSAI FSSGDDLGEDDEDAPMITGFSDDVPMVIA

1084/2682 FIGURE 991

CTCCTCTCAGCCACAGCACCGGCAGCGATTCTGGCGTCTCCGACAGCGAGAGAGTGTGTTCTCAGGCCTGGAAG ATTCCGGCAGTGACAGCAGTGAGGATGATGACGAAGGCGACGAGGAGGAGGAGGAGGAGGCCCTTGATGACGAGG GCCACAGTGGGATTAAAAAGACCACTGAGGAGCAGGTGCAGGCCAGCACTCCTTGCCCGAGGACAGAGATGGCGA GCGCCCGGATTGGGGATGAGTATGCGGAGGACAGCTCTGATGAGGAGGACATCCGGAACACGGTGGGCAACGTGC CCTTGGAGTGGTACGATGACTTCCCCCACGTGGGCTACGACCTGGATGGCAGGCGCATCTACAAGCCCCTGCGGA CCCGGGATGAGCTGGACCAGTTCCTGGACAAGATGGACGATCCTGACTACTGGCGCACCGTGCAGGACCCGATGA CAGGGCGGGACCTGAGACTGACGGATGAGCAGGTGGCCCTGGTGCGGCGGCTGCAGAGTGGCCAGTTTGGGGATG TGGGCTTCAACCCCTATGAGCCGGCTGTCGACTTCTTCAGCGGGGACGTCATGATCCACCCGGTGACCAACCGCC CGGCCGACAAGCGCAGCTTCATCCCCTCCCTGGTGGAGAAGGAGAAGGTCTCTCGCATGGTGCACGCCATCAAGA TGGGCTGGATCCAGCCTCGCCGGCCCCGAGACCCCACCCCCAGCTTCTATGACCTGTGGGCCCAGGAGGACCCCA ACGCCGTGCTCGGGCCCACAAGATGCACGTACCTGCTCCCAAGCTGGCCCTGCCAGGCCACGCCGAGTCGTACA ACCCACCCCTGAATACCTGCTCAGCGAGGAGGAGCGCTTGGCGTGGGAACAGCAGGAGCCAGGCGAGAGGAAGC TGAGCTTTTTGCCACGCAAGTTCCCGAGCCTGCGGGCCGTGCCTACGGACGCTTCATCCAGGAACGCTTCG AGCGCTGCCTTGACCTGTACCTGTGCCCACGGCAGCGCAAGATGAGGGTGAATGTAGACCCTGAGGACCTCATCC CCAAGCTGCCTCGGCCGAGGGACCTGCAGCCCTTCCCCACGTGCCAGGCCCTGGTCTACAGGGGCCCACAGTGACC TTGTCCGGTGCCTCAGTGTCTCCCTGGGGGCCAGTGGCTGGTTTCAGGCTCTGACGACGGCTCCCTGCGGCTCT GGGAGGTGGCCACTGCCCGCTGTGTGAGGACTGTTCCCGTGGGGGGCGTGGTGAAGAGTGTGGCCTGGAACCCCA GCCCCGCTGTCTGCCTGGTGGCTGCAGCCGTGGAGGACTCGGTGCTGCTGAACCCAGCTCTGGGGGACCGGC TGGTGGCGGGCAGCACAGATCAGCTGTTGAGCGCCTTCGTCCCGCCTGAGGAGCCCCCCTTGCAGCCGGCCCGCT GGCTGGAGGCCTCAGAGGAGGAGCGCCAAGTGGGCCTGCGGCTGCGCATCTGCCACGGGAAGCCAGTGACGCAGG TGACCTGGCACGGGCGTGGGGACTACCTGGCCGTGGTGCTGGCCACCCAAGGCCACACCCAGGTGCTGATTCACC AGCTGAGCCGTCGCCGCAGCCAGAGTCCGTTCCGCCGCAGCCACGGACAGGTGCAGCGAGTGGCCTTCCACCCTG CCCGGCCCTTCCTGTTGGTGGCGTCCCAGCGCAGCGTCCGCCTCTACCACCTGCTGCGCCAGGAGCTCACCAAGA AGCTGATGCCCAACTGCAAGTGGGTGTCCAGCCTGGCGGTGCACCCTGCAGGTGACAACGTCATCTGTGGGAGCT ACGATAGCAAGCTGGTGTGGTTTGACCTGGATCTTTCCACCAAGCCATACAGGATGCTGAGACACCACAAGAAGG CTCTGCGGGCTGTGGCCTTCCACCCGCGGTACCCACTCTTTGCGTCAGGCTCGGACGACGGCAGTGTCATCGTCT GCCATGGCATGGTGTACAATGACCTTCTGCAGAACCCCTTGCTGGTGCCCGTCAAGGTGCTGAAGGGACACGTGC ${\tt GGACTGTCCGCCTCTTCACC}$ TACCCTGAAAAAAAAAAAAAAAA

1085/2682 FIGURE 992

MAGSRGAGRTAAPSVRPEKRRSEPELEPEPEPEPPLLCTSPLSHSTGSDSGVSDSEESVFSGLEDSGSDSSEDDD EGDEEGEDGALDDEGHSGIKKTTEEQVQASTPCPRTEMASARIGDEYAEDSSDEEDIRNTVGNVPLEWYDDFPHV GYDLDGRRIYKPLRTRDELDQFLDKMDDPDYWRTVQDPMTGRDLRLTDEQVALVRRLQSGQFGDVGFNPYEPAVD FFSGDVMIHPVTNRPADKRSFIPSLVEKEKVSRMVHAIKMGWIQPRRPRDPTPSFYDLWAQEDPNAVLGRHKMHV PAPKLALPGHAESYNPPPEYLLSEEERLAWEQQEPGERKLSFLPRKFPSLRAVPAYGRFIQERFERCLDLYLCPR QRKMRVNVDPEDLIPKLPRPRDLQPFPTCQALVYRGHSDLVRCLSVSPGGQWLVSGSDDGSLRLWEVATARCVRT VPVGGVVKSVAWNPSPAVCLVAAAVEDSVLLLNPALGDRLVAGSTDQLLSAFVPPEEPPLQPARWLEASEEERQV GLRLRICHGKPVTQVTWHGRGDYLAVVLATQGHTQVLIHQLSRRRSQSPFRRSHGQVQRVAFHPARPFLLVASQR SVRLYHLLRQELTKKLMPNCKWVSSLAVHPAGDNVICGSYDSKLVWFDLDLSTKPYRMLRHHKKALRAVAFHPRY PLFASGSDDGSVIVCHGMVYNDLLQNPLLVPVKVLKGHVLTRDLGVLDVIFHPTQPWVFSSGADGTVRLFT

1086/2682 FIGURE 993A

CACTAGAATGTGAAGGATCTTCGCGGTTCTGGGTGCCCAGAAAGGCGGCGACGCGGCGGATGACAACATTAGTGC $\tt CGCGACGCCTCCTGGCCAGGCGGCGGCTGTAGTGTTAGCTTTGGACGCCGCAGTAGCCGCTGCCGGTAGCAAGC$ CGACTGAGGGAAGGTGGGGGTCCGCCCGGGCTGGTGGACCTCGGGGCCGAAAGTTCCCGCCCCGCTCGGGGGCTG AGCCGGCAGTGCCTCCGCGGCCGCTGGGCAGCGCCCTTCGTCCAGGCTCGCGCCCCAGCTGCCGCCGACGACACAGC GGCCGAGAGAGTTGGGGTCTGACTAGACGCTTACGGGGCCTCGGACCCCGGCGCCGCCGACCTCGGAGGAAC $\tt CGGCTCCTTGCGTCCCGCCTCCCTGGGAGCTCCGCACGGGATTTGCAGATTTACAGAATGGCTGCACATTAATGG$ AAAGAGAAGCATAAACCTATCTTCTTTCATT<u>ATC</u>GAGGGAGGTTTGGCAGATGGAGAACCTGATCGAACTTCGCT TTCTATGTCAAAGAGCAAGTCTGAATCTAAACTTTATAATGGCTCAGAGAAGGACAGTTCAACTTCAAGCAAACT CACAAAAAAGAATCTCTTAAGGTACAAAAGAAAAATTACCGAGAAGAAAAGAAAAGAAGCCACAAAGGAGCTGCT CAGTACAATCACAGATCCTTCTGTTATTGTTATGGCTGATTGGTTAAAGATTCGTGGTACTCTAAAGAGCTGGAC CAAGTTATGGTGTGTGTGAAACCTGGGGTGCTACTGATCTATAAAACCCAAAAAAATGGTCAGTGGGTAGGAAC AGTTCTTCTGAATGCCTGTGAAATCATTGAACGTCCATCAAAAAAGGATGGCTTTTGTTTCAAACTTTTCCATCC TTTGGAGCAATCTATTTGGGCAGTGAAGGGTCCAAAAGGTGAAGCGGTTGGATCCATTACTCAACCCTTACCTAG ATGTTCTAGTCTTCTTAAACGTACAATGATCAGAGAAGGAAAGGAACATGACCTGAGCGTTTCATCAGATAGCAC ACATGTGACTTTCTATGGCTTACTACGTGCTAACAATCTCCACAGTGGTGATAACTTCCAGTTAAATGATAGTGA AATTGAACGACAACATTTTAAGGACCAAGATATGTATTCTGATAAATCTGATAAAGAAAATGATCAAGAACATGA TGAGTCTGATAATGAGGTGATGGGGAAAAGTGAAGAAAGTGACACAGATACATCAGAAAGACAAGATGACTCATA AGGTGAGGCTTCTCAAACAGAAACTGTATCTGAAGAAAACAAAAGCCTTATCTGGACACTATTGAAACAAGTCCG AGATTACTACTATCATGCAGATTTCCTATCTGAGGCAGCTCTTGAAGAAAATCCTTATTTCCGTTTGAAGAAAAGT AGTGAAATGGTATTTGTCAGGATTCTATAAAAAGCCAAAGGGACTGAAGAAACCTTATAATCCTATACTTGGCGA GACTTTCCGTTGTTTATGGATTCATCCCAGAACAAACAGCAAAACTTTTTATATTGCTGAACAGGTGTCCCATCA TCCACCAATATCTGCCTTTTATGTTAGTAATCGAAAAGATGGATTTTGCCTTAGCGGTAGTATCCTGGCTAAGTC TAAGTTTTATGGAAACTCATTATCTGCAATATTAGAGGGAGAAGCACGGTTAACTTTCTTGAATAGAGGTGAAGA TTATGTAATGACAATGCCATACGCTCATTGTAAAGGAATTCTTTATGGTACAATGACACTGGAGCTTGGTGGAAC AGTCAATATTACATGTCAAAAAACTGGATACAGTGCAATACTTGAATTTAAACTAAAGCCATTCCTAGGGAGTAG TGACTGTGTTAATCAAATATCAGGGAAACTTAAACTGGGAAAAGAAGTCCTAGCTACTTTGGAAGGTCATTGGGA TAGTGAAGTTTTTATTACTGATAAAAAGACTGATAATTCAGAGGTTTTCTGGAATCCAACACCTGACATTAAGCA ATGGAGATTAATAAGGCACACTGTAAAATTTGAAGAACAGGGAGATTTTGAATCAGAGAAACTCTGGCAACGGGT AACTCGAGCCATAAATGCCAAAGACCAAACTGAAGCTACCCAAGAGAAGTATGTTTTGGAAGAAGCTCAAAGACA AGCTGCCAGGGATCGGAAAACAAAAATGAAGAGTGGTCTTGCAAATTATTTGAACTTGATCCACTCACAGGAGA ATGCCATTACAAGTTTGCAGATACCCGACCATGGGACCCACTTAATGATATGATACAGTTTGAAAAAAGATGGTGT TATTCAGACCAAAGTGAAACATCGTACTCCAATGGTTAGCGTCCCCAAAATGAAACATAAGCCAACCAGGCAACA GAAGAAAGTAGCAAAAGGCTATTCCTCCCCAGAACCTGACATTCAAGACTCCTCTGGAAGTGAAGCTCAATCAGT <u>ACAGGAAGAAATTAAAAGAAATATTATGGCTCTTCGAAATCATTTAGTTTCAAGCACACCGGCCACGGATTATTT</u> TCTGCAACAAAAAGACTACTTCATCATTTTCCTCCTGATTTTGCTTCAAGTCATAATAAACTTCATGTTCAAG**TA** GAAGTTCTCTACCATTGAATCAGTGAACTAGAAAGATCTGATTTGGCCTGGGACCAGTGTTCAAGTTGGTTTGGT CTTTATTAAAAATCACAATATTCCGAAAACAAAAAAACCTAGGAGATAAATGTAGAGGTATTGACTTTTCGTATC TTTTATCTTCACACTGAAACAAGAGCTATCCTATTTGATTATTAAAGTGAGCTATGTGTTAAGTGCCAGGACATT TCTAGCTTTTGTGAGAATGTGTCTACATATGAGTATAATAAACCCACATGTATACACAATTGTCTCTTATGTACT CCTACCTGACAGTAGTCTTTGTATTCTATAGTATGTTCTGAGATATAATGTTAACATTGTTCATAACAAAAAATG CTATCAATCTTATAAATATATGTAATCTATTTTCTTCATAAAACAGGCACAAAAGTTTTATCAGTAAGGAATTAC

1087/2682 FIGURE 993B

AGATTGAGAAATGATGGAATAATAGACATAATTAATTCAATACACTACTGTTAAAATCATTTGCAAAGCACTCAG TTGCTTTTTTAAAAGTTTACATAAGTTTTTTTTAACCCCTAGAATTTAATATTTTGTAGATGCAGGTAAATATATA GCTGAAAAAAGTGTGGTCAAAATTGATTGCTGTCCTTTTGTCTTATTTTTGTTTTTCTTAAGTCAGCTGGTTCAT AACATAGGCCAAATTCTAGAGATGTTTATAGAGCATTTGAAGTGCTGATAATTTATGTTTTTTCATTATGAAAAC AAAGCCAAAAAGAGGCAATAAGAAAAGACACTTTGTGGTGGCCTTTATGTGTGCATTAAAATTGGTTTCTGTAAA ACGTGTAATAAGTTGAGTATCTACGAAGAGTATCAAGTTCTGAAGTTTAATTTTTTTATTATCCTCCTCTTCT TGTTTCTTCAGTTTAATATTTTGATTTTGTGTTTTTACGTAAATATTTATATTCCTTGAAAGCAATTTTTGCCAA GGTAGTTCAGTTTAGGAATATGTTCTTAAAATATGTCTTAGAATCCTGAAAGCATAGATTTTGAAATGTTTTT TTAATGAAAATGAAGGTCAGAGAGAATAATTGCCCTGACCACATTTGCCTTTCAGTAGGAGGAGGCTGTGAAATA TCAAAATGATAAAAAGAGCCTGCTTTTTTCCCTAACCAATATAGCTATCTTAAGTATCCTTAGGTTTCTGTGAAG AACCATTTCCCATGTTTTCTTGGCAAAATAATGCTGTATTCCATATGTACATGTGAAATGATGTTTTAAATTGAT AAAAGCTTAAATAAGATCTACCTATACCCAGTATTTTCATGATATTAGAACAAATGGGTTTTTGGTTATATTTTA TATTTGTCAATATAATTTTTGTATTCACATTCTGTTACACTCTGCCTATTCATTGATATATGATATTCTGTAAAT TTTCATCAGTAAACCTTGTTAACATTTTGTACTGGTGACCCACCTCTTAGGACTTTGGTCTTATCCACGTGTATG TTGTTTTCATTTGGTCCAAATAATATTTTATTTGTATGGGTATCTTCTAAGACTAAATAGGTAGTTGTTCTTT ATTTTTAAAATTTCTTTTTAGAGCAAATGTTATGGGTTCTTACCCAAAGAGTCAAAAACTATTTCTTAAGAAAAGA GTTGTATGAGTCTCTTTCTATGAACTGAACACAAAACTCAGGAATTGGTGGCTTAATTTTAGATCAGTGCTTGTA CTAGGCTTAGTTATATGAATCTTTATAACACATAATTACTAACTTTGTAGCCATATATGTAATTGACTTTGAATG TTATTTACCTGAAATTAATCTTCCTTCACACATGGACCGTAAACGGTTCCCAGTTGTCTGAGAGCCTCATGAGGG TTTCTAGGATTTATGACCTTATGACCAGTTTTTTTCATTTACCAAGATTTTATTTTCCTACATGAAAATTTAATT GAGTAATAATTATTCACATGTGCATTTTCTTTTTAGCTGTTAAATGTACTATGCCATCATCCACCATTTAGTAAA CAGCAATAGATATTTTATTTGTATTTCATGTTAGTACTTTTTTTGTTTTATATCACTTATAAAGGTACAGTGTACT CTTTGTCACAGCTCAGTTGGTAACCGCATTCCATTGAAAAGTTGGCCTTGTAAAATACAACTCTCATTTAATATT CATGCTTTTGTGCCTTTAAGAAAATATTTTTTGTCATTTTTTGTGTTACAGAACTATAATGTGATTCAAGGTGTT TACTATCTTTATAGGGGTTTGTCTATTTACCTATTCTTTACTCAGACATTGATGTAGACTTGTCAGATTATTCT GAGTATTGTTAACAGTGCCTTTTCGATGGAATCACACTTTTTGGCTGTCACCTTGTGCCATATACACACAAAATT TTGTGGAAGGCAGTTTTAACTTTCTGAAGAATATCTGTCAAAATTTAAGAAAACAAATGTATAAAATTCCATTTT TTCCAGTGTTTAGCATTTCTAGTAAGCAGTGAGGTTGTTTGACATACAGTGATGATGGCATTATTGATAAGCCAT ACATGAGACTGCAGATTATATTGAATCATATTAAATGTACAGAAATAAAATATTAGATTTATATCAAATTTTCCA ATTTGAACCAGTGGGGAAAATCCCACAGAAATCAGTAAGTTTACATTTCAATTTCTATCTTATTTGACTAAGTGG AAAGAGATTCTTTAAAATGTATAACCTGCCATTATGTAATTTGGTTTCATTTTATTCTACCTGTTGTGTGÄGTTT TGAAATTGTATAGGACCAGTGTCTTATTAATATGATTAATATTTTAGAAGAGCCACGTGAAACCCATGACAAAA TGAATGTGAATATTCTTTCTAAAAATTTAGAAAATGTTATCTTTTTGCATTTATTATGTAAAACTGTTTTACAGT ATCAAAATTTTTCACTTAAAGAAAAAAATGCCATGAAACATTTGAACTGATGAGCCACAGAACTTCAGTTGAAA TTTTTTTCACTTTTTAGCATGCTAAATATACATCTGAGTTTAAATGTTCTGTTTAATGGCCATTCATAAATTCAA GCACTACCACTGGTCAGTTTTGTGTGATAGAATAAAATATGTTACCTGCAGTGTAAGTACAGCACACTGTCAAA TTCTTTTCCTTAAGGTGCACAGTAAATGTACAGATAGTTATAGGCCACTGTTTTGTAATGTACATTTCTAAT

1088/2682 FIGURE 993C

TTCTACAAGTAGGCTTCTAAATAAAATTTTTAAAAAGAGC

1089/2682 FIGURE 994

MEGGLADGEPDRTSLLGDSKDVLGPSTVVANSDESQLLTPGKMSQRQGKEAYPTPTKDLHQPSLSPASPHSQGFE
RGKEDISQNKDESSLSMSKSKSESKLYNGSEKDSSTSSKLTKKESLKVQKKNYREEKKRATKELLSTITDPSVIV
MADWLKIRGTLKSWTKLWCVLKPGVLLIYKTQKNGQWVGTVLLNACEIIERPSKKDGFCFKLFHPLEQSIWAVKG
PKGEAVGSITQPLPSSYLIIRATSESDGRCWMDALELALKCSSLLKRTMIREGKEHDLSVSSDSTHVTFYGLLRA
NNLHSGDNFQLNDSEIERQHFKDQDMYSDKSDKENDQEHDESDNEVMGKSEESDTDTSERQDDSYIEPEPVEPLK
ETTYTEQSHEELGEAGEASQTETVSEENKSLIWTLLKQVRPGMDLSKVVLPTFILEPRSFLDKLSDYYYHADFLS
EAALEENPYFRLKKVVKWYLSGFYKKPKGLKKPYNPILGETFRCLWIHPRTNSKTFYIAEQVSHHPPISAFYVSN
RKDGFCLSGSILAKSKFYGNSLSAILEGEARLTFLNRGEDYVMTMPYAHCKGILYGTMTLELGGTVNITCQKTGY
SAILEFKLKPFLGSSDCVNQISGKLKLGKEVLATLEGHWDSEVFITDKKTDNSEVFWNPTPDIKQWRLIRHTVKF
EEQGDFESEKLWQRVTRAINAKDQTEATQEKYVLEEAQRQAARDRKTKNEEWSCKLFELDPLTGEWHYKFADTRP
WDPLNDMIQFEKDGVIQTKVKHRTPMVSVPKMKHKPTRQQKKVAKGYSSPEPDIQDSSGSEAQSVKPSTRRKKGI
ELGDIQSSIESIKQTQEEIKRNIMALRNHLVSSTPATDYFLQQKDYFIIFLLILLQVIINFMFK

1090/2682 FIGURE 995

1091/2682 FIGURE 996

LSTCFGYKAFLTFYKPTFKGNF

1092/2682 FIGURE 997

1093/2682 FIGURE 998

MVLGLLLLXFFSFSSSPSPSSSLLLLSSFFFQSLALSPRLE

FIGURE 999A

ACTTGGGCTCCTCGCCTCTCGCCCTCGTCCCCTCTCCCCTCTCCCCCTTTCCTTTCTTTCT CGGGCGCTCTCACTCGCCTCGTCGGCGCTCCGACAAGGAAGACAATGGGAAGCCCCCGTCCTCCGCCCCGTCC CGGCCCAGACCCCGCGGAGGAAGCGGAGAGAGTCCACCTCGGCAGAAGAGGACATCATTGATGGATTTGCCATG ACCAGCTTTGTCACTTTTGAAGCGCTGGAGAAAGATGTAGCACTTAAGCCTCAGGAACGTGTGGAGAAACGCCAG CACCCACACCACTACAGCTCAGATCGAGAAAATGACCGCAATCTCTGCCAGCACCTTGGGAAGAGAAAAAAATG CCGAAGGCACTCAGACAGCTCAAGCCAGGACAGAACAGCTGCAGGGACAGTGACAGTGAAAGTGCCAGTGGAGAA TCCAAGGGCTTCCACCGGAGCAGCTCTCGGGAAAGGCTCAGTGATAGTTCAGCTCCTTCCAGCTTGGGAACAGGC TACTTCTGTGACAGTGACAGTGACCAGGAAGAGAAGACATCAGATGCCAGCTCTGAAAAACTCTTCAACACTGTT ATTGTAAACAAAGATCCGGAGTTAGGTGTTGGCACGCTACCAGAACATGACAGCCAGGATGCAGGGCCGATTGTC $\tt CCCAAGATATCGGGTCTAGAGAAGACCCAGGAGAAGAGCCAGGACTGTTGCAAAGAGCCAATCTTTGAGCCTGTG$ GTGCTTAAAGACCCCTGCCCTCAGGTCGCACAGCCAATACCCCAGCCGCAGACGGAGCCCCAACTCCGAGCTCCT TCTCCGGACCCTGACTTGGTGCAGCGCACAGAGGCCCCACCTCAACCCCCACCTCTGAGTACACAGCCACCACAG GGCCTCCTGAGGCCCAGCTCCAGCCTGCCCCGCAGCCTCAGGTGCAGAGGCCACCCAGGCCACAGTCCCCCACC CAGCTGCTCCATCAGAACCTCCCACCTGTGCAGGCCCACCCCTCTGCTCAGAGCCTCTCCCAGCCATTGTCAGCC TACAACAGCAGTAGCTTAAGCCTCAACAGTTTAAGCAGCAGCAGAAGCAGCACTCCAGCGAAGACTCAGCCCGCC CCACCTCACATCTCCCACCACCCCTCTGCCTCCCCGTTCCCCCTCTCCCTGCCCAACCACCACCCCCTGCACAGC TTCACACCCACCCTCCAGCCCCCCCCCACACTCACATCACCCCAATATGTTTGCCCCTCCCACTGCTCTGCCTCCT TTGCGACAGGAACTGAACACTCGTTTTTTGGCCTCTCAGAGTGCTGACCGCGGGGGCTTCCCTGGGCCCTCCGCCC ACGCCGTTCCCCCACGCCATCCCACCCACCGCCATCATGCCGACGCCAGCACCTCCCATGTTTGACAAATACCCT ACAAAAGTTGACCCATTCTACCGGCACAGTCTCTTCCATTCCTATCCTCCTGCAGTGTCGGGCATCCCCCCTATG ATCCCACCCACTGGCCCTTTTGGTTCACTACAAGGAGCATTTCAGCCGAAGACATCCAACCCTATCGATGTCGCT GCTCGGCCTGGGACAGTCCCACACACTTTACTCCAAAAGGACCCGAGGTTGACAGATCCTTTCAGACCTATGTTA AGGAAACCAGGGAAGTGGTGTGCTATGCATGTTCACATCGCCTGGCAGATTTACCACCACCAACAGAAAGTCAAG AAACAGATGCAGTCAGACCCACATAAGCTGGACTTTGGACTGAAACCTGAGTTCCTGAGCCGCCCTCCAGGCCCC AGTCTTTTTGGAGCCATCCACCACCCCATGACCTGGCACGGCCTTCAACTTTGTTCTCTGCCGCTGGTGCTGCA CACCCAACTGGGACCCCTTTTGGGCCACCTCCTCATCACAGCAACTTCCTCAACCCTGCTGCCCACCTAGAGCCT $\verb|TITAATCGGCCGTCTACATTCACAGGCCTAGCAGCAGTTGGTGGCAATGCCTTCGGGGGACTTGGAAATCCTTCC|$ GTTACACCCAACTCAATGTTCGGCCACAAGGATGGCCCCAGTGTGCAGAACTTTAGCAACCCTCACGAACCCTGG AACCGGCTGCACCGAACGCCTCCGTCGTTCCCGACCCCTCCGCCCTGGCTGAAGCCAGGGGAGCTGGAGCGCAGC GCGTCCGCTGCAGCTCATGACAGAGATAGAGATGTAGATAAACGAGACTCATCTGTTAGTAAAGATGACAAAGAA AGGGAAAGCGTCGAGAAGAGACACTCCAGCCACCCTTCACCAGCACCTGTCCTCCCGGTGAATGCCCTGGGACAT GAGAGAGACCACTCGGAATCCCGCAAGGACCTGGCCGCCGACGAGCACAAGGCGAAAGAGGGCCACCTGCCCGAG GTGCGGACCCCGGTGGTGGAGAGTGCCAGGCCCAACAGCACCTCGAGCCGGGAGGCCGAGCCGCAAGGGTGAG CCAGAGGCCCCGCAGACCCACCGGGCCTCGGAGCCGCCTCCCAACTCCTCGTCCAGCGTGCACCCGGGGCCC CTGGCCTCGATGCCCATGACGGTGGGGGTGACGGGCATTCACCCCATGAACAGCATCAGCAGCCTGGACAGGACT CGCATGATGACCCCCTTCATGGGCATCAGCCCCCTCCCGGGCGGAGAGCGCTTCCCGTACCCTTCTTTCCACTGG GACCCCATCCGGGACCCCTTGAGGGATCCTTACCGAGAACTTGACATTCACCGGGAGAGACCCGCTGGGCAGGGAC

1095/2682 FIGURE 999B

TTCCTGCTAAGGAACGACCCGCTCCACCGGCTCTCGACTCCCCGGCTGTACGAAGCCGACCGCTCCTTCAGGGAC GAGCGGGGAGCCACCTGGACGAGCGGAGCGCTTGCACATGCTCAGAGAAGACTACGAGCACACGCGGCTCCAC TCCGTGCACCCCGCCTCCTCGACGGACACCTCCCCCACCCCAGCCTCATCACCCCGGGACTCCCCAGCATGCAC TATCCCCGCATCAGCCCCACCGCGGGCAACCAGAACGGACTCCTCAACAAGACCCCTCCGACAGCAGCGCTGAGC GCACCTCCCCGCTCATCTCCACGCTGGGGGGCCGCCCGGTCTCTCCCAGAAGGACGACTCCTCTGTCCGCAGAG ATAAGGGAGAGCCCCCTTCCCACACGCTGAAGGATATCGAGGCCCGATAAGCCGAGAACAGGAGCAAGAACGAG GAAGAAGAACCCTAGGCAGACACCAGGCCAGGCTTGAGAGACAGAACTCCTGCATGGCTCACACAGACTGGGGG GGAAAGCCCCACCCTTCCCCTTGTAAAAAATGTATAGACTCAGTGCACATTTTGAAATGTTTTGTATATTATAT GTTGAGATTTTTCAGATCTTTTAGCCCAGTCATATGTTCTCACGTCTCCTACTTTTTGTTTCTCGTATAAAACTT TTTGATTTGAACCAAAACAGTGAAGATGACAACACACCAATTGGATGATAATTGTAGCGGGGGCGGTGGGGGG GAGAAGTCCACGCCATCCATCCAAAATTCTTTCAGATGAGGTGGGAAGGCCGTGTACATAGTTATGTAAAAA GAGATTGCTTCATGAGCTAATGGTTCATATATGCAAAAGGGTAAGATGAAAGCTTTACTTTGTACAAATGTAAAT TCACAAAAGCCCGCCTAACTCAAAGGAGCCTTTTCAAATCCATTTACAGCATACTTAAGGTCATATTTTCCCTGA TTGGACCCCAGGCTGGAACTTAGCATCTGAAGTTGCCGCTTGTGGGCTCTGGGGGAAAGTGTAGCCCCGGAGAGG TAACTGAGGACATGAGCAACCAGTGCCAGGGAGGGTGGGATTTGCCAGATGCCAAAATCAGGGGACGGGTGGTGG TGTCTGTCAGACACACACAGGTCGCCAGTGACTTCACACACCTCATGTGAGAACCATGCCTTTTTTAGTGTGT CTTCAAGTTTTCTCAGATGATGGATATGTTTTCACTGTATTCAATAACTGACGGATGTAAGGTGCACGTTTCCTG ATGTGACGCACTGTATTCCAGCTGGTGATCAAGTCTGGGAACAGCCGTAACAGGTCAACCTTGTGGAGCCATCGC TGTCTCTTCATAATACTTTTATAATACATTAAGCCTCTTGTCTACATATTTGGAGAGAATATGACTTTACTAGCA CATTGTTTCTAATAAGCAGAGAGATCTATTTTAGTAGTAAACTGAAGGTTTAGTTGTGAGCTTCAGATTTTGTGA ACTCCAGATGTTGTGCGGTGTTTTTTTTTTTTTTTAAGACAACAACTAAAAAAATGCAAGGAATATGTACACTGG TAAAGTCCTTTCTAGATCCTATGTGAAAAGAAAAGTGAAGCAACTGAATCTTCAGCATGTTCTCATCGGCGGAGC CTTCTTGTGTAATGTAAACTGTGCCATGTTATTAAAAAATGTGAACT

1096/2682 FIGURE 1000

MDGPTRGHGLRKKRRSRSQRDRERRSRGGLGAGAAGGGGAGRTRALSLASSSGSDKEDNGKPPSSAPSRPRPPRR KRRESTSAEEDIIDGFAMTSFVTFEALEKDVALKPQERVEKRQTPLTKKKREALTNGLSFHSKKSRLSHPHHYSS DRENDRNLCQHLGKRKKMPKALRQLKPGQNSCRDSDSESASGESKGFHRSSSRERLSDSSAPSSLGTGYFCDSDS DQEEKASDASSEKLFNTVIVNKDPELGVGTLPEHDSQDAGPIVPKISGLERSQEKSQDCCKEPIFEPVVLKDPCP $\verb"QVAQPIPQPQTEPQLRAPSPDPDLVQRTEAPPQPPPLSTQPPQGPPEAQLQPAPQPQVQRPPRPQSPTQLLHQNL"$ PPVQAHPSAQSLSQPLSAYNSSSLSLNSLSSSRSSTPAKTQPAPPHISHHPSASPFPLSLPNHSPLHSFTPTLQP ${\tt PAHSHHPNMFAPPTALPPPPPLTSGSLQVAGHPAGSTYSEQDILRQELNTRFLASQSADRGASLGPPPYLRTEFH}$ QHQHQHTHQHTHQHTFTPFPHAIPPTAIMPTPAPPMFDKYPTKVDPFYRHSLFHSYPPAVSGIPPMIPPTGPF ${\tt GSLQGAFQPKTSNPIDVAARPGTVPHTLLQKDPRLTDPFRPMLRKPGKWCAMHVHIAWQIYHHQQKVKKQMQSDP}$ HKLDFGLKPEFLSRPPGPSLFGAIHHPHDLARPSTLFSAAGAAHPTGTPFGPPPHHSNFLNPAAHLEPFNRPSTF TGLAAVGGNAFGGLGNPSVTPNSMFGHKDGPSVQNFSNPHEPWNRLHRTPPSFPTPPPWLKPGELERSASAAAHD RDRDVDKRDSSVSKDDKERESVEKRHSSHPSPAPVLPVNALGHTRSSTEQIRAHLNTEAREKDKPKERERDHSES RKDLAADEHKAKEGHLPEKDGHGHEGRAAGEEAKQLARVPSPYVRTPVVESARPNSTSSREAEPRKGEPAYENPK KSSEVKVKEERKEDHDLPPEAPQTHRASEPPPPNSSSSVHPGPLASMPMTVGVTGIHPMNSISSLDRTRMMTPFM GISPLPGGERFPYPSFHWDPIRDPLRDPYRELDIHRRDPLGRDFLLRNDPLHRLSTPRLYEADRSFRDREPHDYS HHHHHHHHPLSVDPRREHERGGHLDERERLHMLREDYEHTRLHSVHPASLDGHLPHPSLITPGLPSMHYPRISPT AGNONGLLNKTPPTAALSAPPPLISTLGGRPVSPRRTTPLSAEIRERPPSHTLKDIEAR

1097/2682 FIGURE 1001

1098/2682 FIGURE 1002

MASVTLSEAEKVYIVHGVQEDLRVDGRGCEDYRCVEVETDVVSNTSGSARVKLGHTDILVGVKAEMGTPKLEKPN EGYLEFFVDCSASATPEFEGRGGDDLGTEIANTLYRIFNNKSSVDLKTLCISPREHCWVLYVDVLLLECGGNLFD AISIAVKAALFNTRIPRVRVLEDEEGSKDIELSDDPYDCIRLSVENVPCIVTLCKIGYRHVVDATLQEEACSLAS LLVSVTSKGVVTCMRKVGKGSLDPESIFEMMETGKRVGKVLHASLQSVLHKEESLGPKRQKVGFLG

1099/2682 FIGURE 1003A

AGGGCGTGGTCAGCGCGGCCGAAGGGCGTGGTTGGCGCTCGGTCCTGCCCTGCGCGTTTTGGGCTGCGGTTGGAG GGCCGCAGTTGCAGTCAGGGTCCGCCAGCTCGGGGCCAGCGCATGGGGCTGCTGAGACCGCTCCGGACGTGCGAA TGAAGAAAAGGCAGAAGCATCTGAAGACACAAAGGCCCAGTCCTATGGGAGAGGGAGCTGCAGGGAGCG TGTATGGGGGGCAGAAGGGATACCTGCCCCTACTTGCTGGATTGGGACTGACCCTGGCGGCCCCTCTAGAGCCCA TGCCACCATGGGGTCTGGAGACCTTCTGCTCTCCGGGGAAAGCCAGGTGGAGAAGACCAAGCTTTCTTCCTCCGA GGAGTTCCCTCAGACTCTGAGCCTTCCCAGAACAACAACTATTTGCTCAGGACATGATGCTGATACCGAAGATGA ACAGTGGAAGTCCGTGCTGAGCCCAGGTTCCGCAGCTCAGCCTTCCAGCTGCAGCATCTCTGCTTCCTCCACAGG CAGCAGTCTCCAGGGTCACCAGGAGAGGGCGGAGCCTCGTGGTGGTTCTCTGGCCAAGGTCTCCTCCTCCTGGA GCCGGTCGTCCCCAGGAACCTTCCTCTGTGGTGGGGCTAGGACCTCGGCCCCAGTGGTCACCACAGCCTGTGTT CTCTGGGGGTGATGCTTCTGGGCTAGGCAGGAGACGCCTCTCCTTCCAGGCTGAGTACTGGGCCTGTGTGCCC AGATTCCCTGCCTCCATCACCCGACCGCCACTCCCCTCTCTGGAACCCAAATAAAGAGTATGAAGATCTGCTTGA CTATACTTACCCACTGAGGCCCGGGCCTCAGCTCCCAAAGCACCTTGATAGCCGTGTGCCAGCTGACCCTGTCCT $\tt CCCCAACTGCCCACCAGCAGAGGCCACTGCCCTGCCATTTTCTGGGCCCAGAGAGCCAAGCCTTAAGCAGTGGCC$ CTCCAGAGTACCCCAGAAACAGGGTGGCATGGGCTTGGCATCTTGGAGCCAACTTGCATCTACCCCCAGAGCCCC GCACCTTGATATGGGCTCTCCCCAGCTAAGGACACGGGACAGAGGGTGGCCCTCGCCCAGGCCAGAGAGGGAGAA GAGGACCAGCCAGAGTGCCCGGCGCCCTACCTGCACAGAGTCTAGGTGGAAATCAGAAGAGGAAGTGGAAAGTGA TGACGAGTATCTTGCCCTCCCCGCTCGGCTGACACAGGTTTCTAGCCTGGTTTCGTATCTAGGATCCATTTCTAC CTTGGTTACCCTGCCCACTGGGGATATCAAAGGGCAGAGCCCCTTGGAAGTGTCAGACAGTGATGGGCCAGCTTC CTTCCCTTCAAGCTCCAGCCAAAGCCAGCTTCCCCCTGGAGCTGCCCTCCAAGGATCTGGGGATCCTGAGGGCCA GAATCCCTGTTTCCTGCGCTCCTTCGTCCGTGCCCACGACTCCGCAGGGGAAGGCAGTCTGGGGAGCAGCCAGGC CCTCGGGGTCTCCTCTGGACTGCTGAAAACACGCCCCTCCTTGCCAGCTAGGTTGGACCGGTGGCCATTCTCAGA CCCAGATGTTGAAGGGCAGCTTCCCAGGAAAGGAGGAGAACAGGGAAAAGAATCACTGGTGCAATGTGTGAAGAC ATTTTGCTGTCAGCTGGAAGAGCTGATCTGCTGGCTGTATAATGTTGCAGATGTTACTGACCACGGGACTGCAGC GTCTCTGACGGAGAGTGTCTTACAGAAGGGGGAGATTCTTCTTCAGTGCCTGTTGGAGAACACCCCAGTTTTAGA GGATGTCCTTGGGAGGATCGCAAAGCAGTCTGGTGAGCTGGAGAGCCACGCAGATCGCCTGTATGACTCTATCTT GGCCTCTCTGGACATGCTGGCTGGCTGCACCCTTATCCCTGACAAAAAGCCCCATGGCGGCAATGGAGCACCCATG TGAAGGGGTTTAACCTGGCATCTTCTCAGGCAGAGGTGCAACCTGTCGGCCAAACACTGGCTAGTGAGAAAAAAT CCTTCAAGAAGTCCTTGCAAGAGCCATTCAACACTGAAGTCAAGGGGGAAACCTTCAATATACTAGCTTTAAAAT TTTTGGTGCTTCTCCACAAAGAGCGTGTAGCTTTGCAATTTTTGATAAAATAAGACGTGTTGCCTTCCCCTCTAT CCCATTAAAAAAGGGCAGATAAAGCTCAAACTATTCCACCTGGTAGGGTCATTTACCAAGGGCTGGTAGGAGATT CCGAATACTCAATATTCTCAGGCATGCAAGAGGACCTAAGAGACTGAAAAAAGTGAATTGTTGGCCAGAAACCTT CCTTTGTCTGCAAAAGAAAAGGGTTAAATGAAGCATCTATACAGATGACTTTGGGAGATTATGACACCTTTTGC CATCTTCAGGGCTTACGTCTTTACTTTCTTGGCTAACCAGTTTCTTAGAAGAAAATGTGTCAGGGACTTGGGGAT CTACAGTCATGCTTTAGCATGGCTATGGAGCTAATTATCAAGCTTAAAGGGTAACTTTGGGAGGACTCCTCCCTT ACTGAAGCTGTCAATAGTGAAGGAAAAAGGGGAATTCTTCGTTGCTTTGGCATTGACACATAAGTACTTTGATTA AAAAAAAAAAACTATGGATCAACCATTCAAAGCATCAATTCTATAGCTTTTTGCAGCAAGATGATCAGTTATT GCACAGTAACAATGGAAACTAAAGTCCTATTATTAATGTGACTTTTCTGCTTCAGAATTTCTGAGACTTTATAGT

1100/2682 FIGURE 1003B

CACTGGAAAATAGCCATTAAATTCTTTAAAGATTAGCTCTTCAACAGTAGCTACACATAAAATGCAGTATTTCAA GTGCCTGATGCTGCTGTGGTATGCTTTATCATAATGCTTAAGGGCATGATCAAAATTAAAATGGCTTATGAGTTT GCCATATTAATCATCTTAGTTCCATACACACTGAGACTTTAAAAGGGAAAAACCACTCTAGCAAATAATTGTCAA TTATAAACCTGTATGTAAAACATTCTTGAAAACCTAGAGTTGGTTAAAAAGGTAGAGATGTCTGACGGCCTCTTC TTAAATTGATATTTTACCTTCTCTTAGATGTATATTTATAAGTAGGAACATGTCCTTCCACTGAGTATGTTAC AAGTTGGAGATGAAAACCCTATAGAAACAAATTGGCCAATATTATACTAATTGAATGCAGAATGTGGCATTCTAT TCCCATTCAACTAATAATCAGCTTCAACTGACAGGAATTTGCACAGAATGTTACACAATACCCTGTTTCCCAAGA AAGTACTACCTTACCTAGAGATGATCTAAGATATTTTTGTTCATCCTCTGAATAAGGTGAGACTAAAGGGTGCTA ACTCCCTGGACCTGGCTGTGAATGCTACTGAAGAGTATCAACACAACTGTTAATTATACCGCCGTGCTTTAAGTT TAAGACTTACCTTAAAACTCAAGCTGAAGGCTGGGCACGGTGGCTCATGCCTGTAATCCCAGCACTTTGGGAGGC CGAGGCGGGTGGATCACAAGGTCAGGAGATCGAGACCATCCTGGCTAACACGGTGAAACCCCCATCTCTACTAAAA ATACAAAAGAAATTAGCCAGGCGTGGTGATGGGCGCCTGTAGTCCCAGCTACTTGGGAGGCTGAGGCATGAGAA ${\tt TGGCATGAACCCGGGAGGCGGAGCTTGCAGTGAGCTGAGATGGCACCACTGCACTCCAGCCTGGGCAACAGAGTG}$ AGACTCTTGTCTCAAAAAAAAAAAATCAAGCTGAAATTGTTTCAGCCTAGTAAGATGCTGCCAGCAGCATTTCTA TGAGCAAACATGGCCAAATTAGAGTCAAGTAGCTGAGCTTGCTAACTGCACTGTGATGCCACACTGGAATAACTT AGTAGTCCCTTAAAATTAATGGAAGTTAAATCCACAGGGAAGTGATGATACTCAAAGCTGGATCAGCAGTTTCAA GATCTGGGTTCTTGGAGATCCATAGGTAAGCTCAGCAAATGGAAGACGACGTCAACACAGGGCTATTTTGAAGCT TAGGTGGGAATGGAACACAAAGAAGGTTTGAGGTAAGATATGCTGGAAAGGCAAGATGTAGGCTAAGGGAAATTC AATCCAAGGTCGAAGAATAGGAAATTACTGCTCAGACCACAATGACTATCATTCTGAAAGGATTTCACAGAGTGT GCAGCTGCTTAGATTTAAGAACACTCTTCTTCACTATGTAAACTAATTTATGGCAGCACCTTATATTTAGAACAA GTGGTAATTCCCTTTACTAAGTGAACAGATTATTAAAACCTGTAGTAGCTTTGAACCGTTTGTACTTGAAAATGG GGGTATAAAGGGGTATATATTTTTTCCAGAACCACATTTATTGGCGTATACATAGAAGCAAATCTTAAGGCATGC TGAAATTTGTTGTAAATCCCAATCTTTACTGCCATGGGGAAAAGAACGCTGGAATTTTCCAAACTTAAGTCTGTA AATATGCTCATCTTAAGTTCATGTAATGTTTCCGCTAACTCACCAAGAATAAGCTGACAATTTAAACAACTTTTA CTGTGTAAAAATGAAGTGCACGGCATGGCATCACAGTATCTTGACATTTGTTTTTGTGTCATTTAGCTACTTTAGA AAATAGTTTCTGAACTCTTTCCCCCTTTATACTGTATTAAGGCAAAAACAAAACTTCTGAAGCATTAAAGATCTT CACCAAAATAACTATTGGTAACTTCAGGAATTTGTCAGTTGCCTTATGTGAGGATGAATAGATCCACCAAGCACG CCTATAATACAAAGTAAACTATGATTTTTATTGTGAAATTTTCATAGATGGAAAATTGAATATTCTGTCCATTTC ATTTTACAATTATCTTACCACTTATTTTTGTACCATGTATTTCAATTGCCTGTTTAGTGAAAAAATAAAAATTAAA AAAACCT

1101/2682 FIGURE 1004A

CGCCGGCGGCCGTGTGTGAGGAGCAGTAGAGAACTGTGGACTATTCTGCTTGGAAGGTCAGCTCTGAGAGAGCT GAGTCAGATTGAGGCAGAACTGAATAAACATTGGCGGCGATTGTTAGAGGGGGCTTTCTTACTACAAACCTCCCAG ${\tt TCCAAGTTCAGCTGAAAAAGTGAAAGCTAATAAAGATGTAGCTTCACCATTGAAGGAACTGGGTTTAAGAATCAG$ CAAGTTTTTGGGTCTTGATGAAGAACAGAGTGTGCAGTTACTCCAGTGTTACCTGCAAGAGGACTACAGGGGTAC TCGGGACTCAGTAAAGACAGTACTGCAAGATGAGAGGCAGAGCCAGGCCTTAATCCTGAAGATTGCAGATTATTA GCTTTATAAAACTGAAGCACCAACTTGGGAGACACATGGAAATCTCATGACAGAGCGCCAAGTGTCTCGCTGGTT $\tt TGTTCAGTGCCTTCGGGAACAGTCCATGCTGCTAGAAATTATTTTCCTTTATTATGCATACTTTGAGATGGCACC$ CAGTGACTTACTTGTATTAACCAAGATGTTTAAAGAGCAAGGATTTGGTAGTAGGCAGACCAATAGGCACCTGGT GGATGAGACTATGGATCCTTTTGTAGATCGGATTGGCTACTTCAGTGCCCTCATCCTGGTGGAGGGCATGGATAT CGAGTCCTTGCATAAGTGTGCTTTGGATGACAGAAGAGAACTGCATCAGTTTGCGCAGGATGGGCTTATTTGTCA GGATATGGACTGTTTAATGTTGACCTTTGGGGACATTCCACATCATGCCCCAGTGCTTTTGGCCTGGGCTCTCCT CCGTCACACTCTGAACCCAGAAGAGACAAGCAGTGTGGTCCGGAAGATAGGTGGCACAGCCATCCAGCTGAATGT GTGTGTCTATGGACTGCTCTTTCGTTCTGACCTCGTTGGAGCTGCACACCCTGGGCAATCAGCAGGATATAAT TGATACAGCATGTGAAGTATTGGCCGACCCTTCTCTTCCGGAACTGTTCTGGGGAACAGAGCCAACTTCTGGCCT TGGGATCATTCTGGACAGTGTGTGGGAATGTTTCCCCACCTTCTCTCCCCACTCCTGCAACTGCTCCGAGCCCT GGTATCAGGGAAGTCCACAGCCAAAAAGGTGTATAGCTTCTTGGATAAGATGTCTTTCTACAATGAACTTTATAA ACACAAGCCTCATGATGTGATCTCCCATGAAGATGGAACTCTTTGGCGGAGACAAACACCCAAACTCCTTTATCC CCTTGGGGGTCAAACCAACCTTCGCATACCTCAAGGCACTGTGGGCCAAGTAATGTTGGATGATAGGGCATACCT GGTACGCTGGGAATACTCCTATAGCAGCTGGACCCTCTTTACCTGCGAGATTGAAATGTTGCTTCATGTTGTTTC AACTGCAGATGTGATTCAGCACTGCCAGCGAGTCAAACCCATCATTGATCTCGTCCATAAGGTCATCAGTACAGA CCTGTCGATAGCAGACTGTCTCCTGCCCATCACATCTCGCATCTACATGCTGCTGCAGCGGTTAACGACAGTGAT $\tt CTCCCCACCTGTGGATGTCATTGCTTCTTGTGTCAACTGCTTAACTGTTTTGGCTGCCCGCAATCCAGCAAAGGT$ CTGGACTGATCTTCGTCACACAGGTTTTTTACCATTTGTGGCCCATCCTGTCTCCAGCCTGAGTCAGATGATTAG TGCGGAAGGGATGAATGCTGGAGGGTACGGAAACCTCTTGATGAACAGTGAACAGCCTCAGGGCGAGTATGGGGT TACTATTGCCTTTCTGCGCTTGATCACCACCCTTGTCAAGGGGCAACTTGGTAGTACCCAGAGCCAAGGACTTGT ACCCTGTGTAATGTTTGTGCTGAAGGAGATGCTTCCCAGCTACCATAAGTGGCGCTACAACTCTCATGGAGTGAG TATCATGGGCATTGGCGTGGACACCATTGACATGGTGATGGCTGCTCAGCCTCGAAGTGATGGGGCAGAGGGCCA GGGGCAGGGCCAGCTGCTGATCAAGACAGTGAAACTGGCATTCTCCGTCACCAACAATGTTATTCGGCTGAAAACC TCCTTCTAATGTGGTGTCCCCCCTGGAACAGGCTCTCTCACAACATGGTGCTCATGGAAACAACCTCATTGCTGT TCTAGCCAAATACATCTACCACAAACATGACCCTGCTTTGCCACGTCTTGCCATTCAGCTGCTGAAACGTCTGGC CACGGTGGCCCCAATGTCAGTGTATGCTTGTCTGGGCAATGATGCGGCTGCCATTCGTGATGCCTTCCTGACCCG ATTGCAGAGCAAAATTGAGGACATGCGCATCAAAGTCATGATTCTAGAGTTCCTCACTGTTGCAGTAGAGACCCA GCCAGGCCTCATCGAACTGTTTCTGAACCTGGAAGTTAAGGATGGCAGTGATGGCTCAAAGGAATTCAGCCTTGG GCTGCATCGTGCCGCCATTGCCTTTTTGCATGCTCTGTGGCAGGATCGGAGGGACAGTGCCATGCTGGTCCTCCG AACCAAACCCAAGTTTTGGGAAAATTTAACCAGTCCGCTGTTTGGAACCCTTTCTCCTCCTCTGAAACATCAGA GCCCAGCATCCTGGAAACCTGTGCCCTAATCATGAAGATAATTTGCTTGGAGATATACTATGTAGTAAAGGGTTC ATTAGACCAGTCATTAAAGGATACACTGAAGAAATTTTCCATCGAGAAACGCTTTGCCTACTGGTCAGGGTATGT CAAGTCATTGGCAGTTCACGTGGCCGAAACAGAAGGCAGCAGCTGCACCTCCTTGTTAGAGTACCAGATGCTGGT TCGCCAGCTCTTTCTTGACGTGCTTGATGGAACCAAAGCATTACTCCTAGTTCCAGCCTCAGTGAACTGCCTTCG AATCCTTGGACCCTTGACGGAGATCCTGGAGGGAGTGCTGCAGGCCGACCAGCAACTCATGGAGAAGACCAAGGC

1102/2682 FIGURE 1004B

GCTGGTGCTGAATGTCTGTGAGACCCTCCAAGAGGAAGTGATTGCACTCTTCGACCAGACCCGCCACAGTCTGGC ATTAGGCAGTGCCACAGAGGACAAGGACAGGAGAGTGACGACTGTTCTCGGTCCCGGCACAGGGACCAGCG TGATGGGGTGTGTGTCCTGGGCCTGCACCTGGCCAAGGAGCTGTGTGAGGTAGACGAGGATGGTGACTCCTGGCT GCAGGTAACCCGCAGGCTCCCCATCCTACCCACCCTCCTCACCACTCTAGAGGTGAGCCTTCGCATGAAGCAGAA CCTGCATTTCACTGAGGCCACATTGCATCTGCTCCTCACCCTGGCTCGCACTCAGCAGGAGCCACAGCAGTGGC TGGAGCTGGCATCACCCAGAGCATTTGTTTGCCCCTTCTGAGTGTGTACCAGCTGAGCACCAACGGCACAGCACA GACACCTAGTGCCTCTGGAAGTCCCTGGATGCCCCCTCTTGGCCAGGAGTCTACCGCCTGTCCATGTCCCTGAT TTTTATTCTGCAGCTCTCTAACTTCATGAAGGAGTGGCACTTCCACCTGCCTCAGCTCATGCGTGATATCCAGGT CAAAAATGGGGATGGCCTCCCCTCAGCTGTTGCCCAGCGAGTCCAGAGGCCACCGTCTGCTGCTTCTGCTGCCCC CTCCTCCTCAAAGCAGCCCGCTGCTGACACAGAGGCATCAGAGCAGCAGGCCTTGCACACAGTCCAGTATGGCCT TCTCAAGATCCTCAGCAAGACGCTGGCAGCCCTGCGCCACTTCACCCCAGATGTCTGCCAGATTCTGCTGGATCA GTCCCTGGACCTTGCTGAATACAACTTCCTGTTTGCCCTGAGCTTTACCACTCCCACCTTTGACTCCGAAGTGGC CCCCTCCTTCGGGACCCTTCTGGCCACAGTGAATGTGGCCCTCAACATGCTTGGAGAGCTGGACAAGAAAAAGGA GCCCCTCACCCAGGCAGTGGGGCTCAGCACACAGGCAGAAGGGACCAGGACGTTAAAGTCCCTCCTGATGTTTAC CATGGAAAACTGCTTCTACCTGCTCATCTCTCAGGCGATGCGGTACCTTAGGGACCCGGCTGTGCACCCCCGGGA CAAACAGCGGATGAAGCAGGAGCTCAGCTCTGAGTTGAGCACGCTGCTGTCCAGCCTCTCGCGCTACTTCCGCCG CCCTGAGAGTCAGGAGCCTCTGATCCAGTTGGTGCAGGCGTTTGTCCGGCATATGCAAAGATAGGGCAGTGCTGT TACAATGGAGGGCACCTCCTGTCACCCCCCTCCCGGAGTAGCCACGACTCCAGCCACCACCACCTGACGTTATTT TTATACTAGATGAAGAGGTCAACAGCAGGCATGGGGAGCCGAGTCTTCTGTGCTCAGGTCCTCACGCTGCAGACG CCCCCTAGAGGAACTTTCCTTCCTTTCCAGCATTCCCCACAGCACTGCCGGCCAGGGGAGAGGCGGCAGCCCAGC AGAGGGCTCTATGCACGGGTTTCAAACCTGTTTTCCACACTCTGTCTTTGCAGTTTTGGTAATTCTGTGGTCTAT TTATACAGATATTAAAATCTTGTTTATAGAC

1103/2682 FIGURE 1005A

GGCCGAGTCGTGGCGGAGACGGTGCAGCTGTACGAGGACGAGGTGCGCGAGCTGGAGGAGGCGCTGCGGCGCGCG GCTCGGGTTGGAGCAGCTGCGCGCGGCTGGAGGACGCGCTGCTGCGGATGCGCGAGGAGTACGGGATACAGGC CGAGGAGCGGCAGAGAGCGATTGACTGCCTGGAGGATGAGAAGGCAACCCTCACCTTGGCCATGGCTGACTGGCT GCGGGACTATCAGGACCTCCTGCAGGTGAAGACCGGCCTCAGTCTGGAGGTGGCGACCTACCGGGCCTTATTGGA AGGAGAAAGTAATCCAGAGATAGTGATCTGGGCTGAGCACGTTGAAAACATGCCGTCAGAATTCAGAAACAAATC AAGTTTCAATCACAGCTCGGCACTGTATTCTAACCTGTCAGGGCACCGTGGATCTCAGACGGGCACATCTATTGG AGGTGATGCCAGAAGAGGCTTCTTGGGCTCGGGATATTCTTCCTCGGCCACTACCCAGCAGGAAAACTCATACGG AAAAGCCGTCAGCAGTCAAACCAACGTCAGAACTTTCTCTCCAACCTATGGCCTTTTAAGAAATACTGAGGCTCA AGTGAAAACATTCCCTGACAGACCAAAAGCCGGAGATACAAGGGAGGTCCCCGTTTACATAAGTGAAGATTCCAC AATTGCCCGCGAGTCGTACCGGGATCGCCGAGACAAGGTGGCAGCAGGTGCTTCGGAAAGCACACGGTCAAATGA ATTGACAAAGTTAGATAAGGAAGCGAGACAGAGAGAGAAAGCCAGCAGATGAAGGAGAAGGCTAAGGAGAAGGACTC ACCGAAGGAGAGAGTGTGCGAGAGAGAGAGGTGCCGATTAGTCTAGAAGTATCCCAGGACAGAAGAGCAGAGGT GTCCCCGAAAGGTTTGCAGACGCCTGTGAAGGATGCTGGTGGTGGGACCGGTAGAGAGGCAGAAGCAAGAGAGCT ACGGTTCAGGTTGGGCACCAGTGATGCCACTGGTTCTCTGCAAGGCGATTCCATGACAGAAACCGTAGCAGAAAA CATCGTTACCAGTATCCTGAAGCAGTTCACTCAGTCTCCAGAGACAGAAGCATCTGCTGATTCTTTTCCAGACAC AAAAGTCACTTACGTGGACAGGAAAGAGCTTCCTGGGGAAAGGAAAACAAAGACTGAAATAGTTGTGGAGTCTAA ACTGACTGAGGATGTTGATGTTTCCGATGAAGCTGGCCTGGACTACCTTTTAAGCAAGGATATTAAGGAAGTGGG AAAGGTCGTCAACGTGGAGATCGTGGAGGAGCCCGTGAGTTATGTCAGCGGGGAGAAGCCGGAGGAGTTTTCCGT AGAAAGCGATGTCACATTCTCAGTTAATCAGCATCGAAGGACCAAGCAGCCCCAGGAGAACACGACTCACGTGGA AGAAGTGACAGAGGCAGGTGATTCAGAGGGCGAGCAGAGTTATTTTGTGTCCACTCCAGATGAACACCCCGGGGG GCACGACAGAGATGACGGCTCGGTGTACGGGCAGATCCACATCGAGGAGGAATCCACCATCAGGTACTCTTGGCA GGATGAAATCGTGCAGGGGACTCGAAGGAGGACACAGAAGGACGGTGCAGTGGGCGAGAAGGTTGTGAAGCCCTT TCATGCCGAACCCACAGTCATTGAAAAAGAAATTAAAATACCCCACGAATTCCACACCTCCATGAAGGGCATCTC CTCCAAGGAGCCCCGGCAGCAGCTGGTGGAGGTCATCGGGCAGCTGGAGGAAACCCTTCCCGAGCGCATGAGGGA GGAGCTGTCCGCCCTCACCAGAGAGGGGCAGGGTGGGCCGGGGAGCGTTTCCGTGGATGTCAAGAAGGTCCAGGG TGCTGGTGGCAGTTCCGTGACCCTGGTTGCTGAAGTCAACGTCTCACAAACTGTGGATGCCGATCGGTTAGACCT GGAGGAGCTGAGCAAAGATGAGGCCAGTGAGATGGAGAAGGCTGTGGAGTCGGTGGTTCGGGAGAGCCTGAGCAG GCAACGCAGCCCAGCCCTGGCAGCCCAGATGAGGAAGGTGGAGCGGAGGCCCCGGCTGCTGGCATTCGCTTCAG GCGTTGGGCCACCCGGGAGCTGTACATCCCTTCAGGCGAGAGCGAGGTTGCTGGTGGGGCCTCTCACAGCTCGGG ACAGCGCACTCCCCAGGGCCCAGTGTCGGCCACTGTGGAGGTCAGCAGCCCCACAGGCTTTGCCCAGTCACAGGT GCTGGAGGATGTGAGCCAGGCTGCAAGGCACATAAAACTCGGCCCCTCTGAAGTCTGGAGGACTGAGCGAATGTC ATATGAAGGACCCACTGCAGAAGTGGTGGAGGTAAGTGCGGGAGGTGACCTAAGTCAGGCAGCCGAGCCGACCGG AGCCAGCCGGTCTGTGAGGCATGTCACGCTGGGTCCCGGTCAAAGTCCACTGTCCAGAGAAGTCATCTTCCTAGG CCCTGCCCTGCCTGTCCAGAGGCATGGGGCTCGCCAGAACCTGGCCCAGCAGAGTCTTCTGCAGATATGGACGG ATCAGGGAGGCACACCACTTTGGCTGCAGACAATTTCATGCTGAAAAGGAGATTATTTTTCAGGGCCCCATTTC TGCTGCAGGGAAGGTTGGTGATTATTTTGCAACAGAAGAGTCAGTGGGTACCCAGACTTCTGTCAGGCAACTCCA GTTAGGCCCTAAAGAAGGGTTCAGTGGGCAAATCCAGTTCACAGCTCCACTTTCAGACAAGGTGGAGTTGGGTGT GAGGCATCAGACCACCCAGCAGATAGTTTACCATGGGCTGGTTCCCCAACTGGGGGAATCTGGTGACTCAGAGAG CACTGTGCACGGAGAGGGCTCAGCAGATGTGCACCAGGCCACTCACAGTCATACCTCGGGTAGACAAACCGTTAT GACTGANAAGAGCACCTTCCAAAGTGTCGTTTCTGAATCTCCCCAGGAGGATAGTGCAGGGGACACATCAGGGGC

FIGURE 1005B

AGAAATGACATCGGGTGTTAGCAGATCCTTTAGGCACATTCGACTAGGTCCTACAGAAACGGAAACCTCTGAACA GAGTAACGTAGAGGCGATCCGCAGCCGGACACAGGAAGCGGGAGCTCTCGGTGTGTCTGACCGTGGTTCCTGGAG AGACGCGGACAGTAGGAATGACCAGGCAGTTGGTGTGAGCTTTAAGGCCTCTGCTGGGGAAGGAGACCAGGCCCA CAGAGAACAGGGCAAGGAGCAGGCCATGTTTGATAAGAAGGTGCAGCTCCAGAGAATGGTAGACCAAAGGTCGGT GATTTCAGATGAAAAGAAAGTTGCCCTCCTCTATCTAGACAATGAGGAGGAGGAGAATGATGGGCATTGGTTTTA ATAAGCAGAAACATTTTGTTTTAATGGCAGCCTGTTGGCGACGTGCCAACATCCAAAGGCCTTAACTTATTTTAA GAGGCCGAGGGAGTCTATGAAAATCTCCCCTTTTTTACTTTTTTAAAGAGTACTCCCGGCATGGTCAATTTCCTT TATAGTTAATCCGTAAAGGTTTCCAGTTAATTCATGCCTTAAAAGGCACTGCAATTTTATTTTTTGAGTTGGGACT TTTACAAAACACTTTTTTCCCTGGAGTCTTCTCTCCACTTCTGGAGATGAATTTCTATGTTTTGCACCTGGTCAC AGACATGGCTTGCATCTGTTTGAAACTACAATTAATTATAGATGTCAAAACATTAACCAGATTAAAGTAATATAT TAGACTCTAAAAAGTCTTTTCAAAAAGAAATGGGAAATAGGCAGACTGTTTATGTTAAAAAAATTCTTGCTAAAT TGTACAGAACTTTAAACAATATAGTATTTATGGCGAGGACAGCTGTAGTCTGTTGTGATATTTCACATTCTATTT GCACAGGTTCCCTGGCACTGGTAGGGTAGATGATTATTGGGAATCGCTTACAGTACCATTTCATTTTTTGGCACT AGGTCATTAAGTAGCACACAGTCTGAATGCCCTTTTCTGGAGTGGCCAGTTCCTATCAGACTGTGCAGACTTGCG CTTCTCTGCACCTTATCCCTTAGCACCCAAACATTTAATTTCACTGGTGGGAGGTAGACCTTGAAGACAATGAAG TGTGCCTCTTAAAGATGCCTTTCCCAACCCTCCATTCATGGGATGCAGGTCTTTCTGAGCTCAAGGGTGAAAGAT AGCACCGAGATACCCAGGACGGCCTGGGGGGCGAGAAAGGCCCCCATGCTCATGGGCCGCGGAGTGTGGACCTG CGCACTGGGGAATAACAGTCTGAGCTAGCACCACCCTCAGCCAGGCTACAACGACAGCACTGGAGGGTCTTCCCT CTCAGATTCACCTGGAGGCCCTCAGACCCCCAGGGTGCACGTCTCCCCAGGTCCTGGGAGTGGCTACCGCAGGTA GTTTCTGGAGAGCACGTTTTCTTCATTGATAAGTGGAGGAGAAATGCAGCACAGCTTTCAAGATACTATTTTAAA AACACCATGAATCAGATAGGGAAAGAAAGTTGATTGGAATGGCAAGTTTAAACCTTTGTTGTCCATCTGCCAAAT TGCTGATTTTGTTTTAGCTGTAACAGGTAATGGTTTTTGGATAGATGATTGACTGGTGAGAATTTGGTCAAGGTG ACAGCCTCCTGTCTGATGACAGGACAGACTGGTGGTGAGGAGTCTAAGTGGGCTCAGTTTGATGTCAGTGTCTGG TATCTTGGATCTTAATTATCATCTGCAAGTTTCAAGAAGTATTCTGCCAAAAGTATTTACAAGTATGGACTCATG ACAAGCTCCATGTCCTTTAAAATCAGTCACTCTGCACACAAGAGAAATCAACTTCGTGGTTGGATGGGGCCGGAA CACAACCAGTCTTTTTGTATTTATTGTTACTGAGACAAAACAGTACTCACTGAGTGTTTTTCAGTTTCCTACTGG TGGTTTTGATATTGTTTTAAGATGTATATTTAGAATGACATCATCTAAGAAGCTGATTTTGCTAAACTCCTG TTCCCTACAATGGGAAATGTCACAAGAATGTGCAAAAATAAAAATCTGAGG

1105/2682 FIGURE 1006A

TTTAAACTGTGCTTTCTAAGCACAGTCAGGTAGCAAAAGTAATAAAAAGGATGGTTGAACAAGTTTTCTTGTATG TTCCAGGATATGTTTGGGACTTTTCTTTGTTTATTATATGAGTTGTTCCCTTTGAAATTAAAGCTATTTTGTAGG TTTTGTGGGACATAATTTGATAAGTAGAGTTAATTAAATTTCTTCTGGAAGAGATCTAAATTCTTATTCTTAGTG AGAGACTGTAGTTAAAAGGAAGGCTTTTAGAACTTGGGTTCAAGGAAGATGGAGATGCGTCGGAAGCTCTTTGGC GGGGGTGAGGAAGTTCAGAAAGTGTGCATTTTCCTTCTGGCATTTAGGTCTTGTCCGTGTGATTTGGTGGTGCTT $\tt CTGGAGCGCTGAAAAGTTGTTCCTGACCAGGCTCTAATGAGAAATTCCTCTCTCCCCAGGTTATGAAGACAGT{\bf AT}$ ${\tt CACTGTTCTGGTGGGAGATGCCCAGTTCCGAGCGCACCGAGCTGTACTGGCTTCATGCAGCATGTATTTCCACCT}$ CTTTTACAAGGACCAGCTGGACAAAAGAGACATTGTTCATCTGAACAGCGACATTGTTACAGCCCCCGCTTTCGC TCTCCTGCTTGAATTCATGTATGAAGGGAAACTCCAGTTCAAAGACTTGCCCATTGAAGACGTGCTAGCAGCTGC CAGTTATCTCCACATGTATGACATTGTCAAAGTCTGCAAAAAGAAGCTGAAAGAGAAAGCCACCACGGAGGCAGA CAGCACCAAAAAGGAAGAAGATGCTTCAAGTTGTTCGGACAAAGTCGAGAGTCTCTCCGATGGCAGCCACAT AGCAGGCGATTTGCCCAGTGATGAAGATGAAGGAGAAGATGAAAAATTGAACATCCTGCCCAGCAAAAGGGACTT GGCGGCCGAGCCTGGGAACATGTGGATGCGATTGCCCTCAGACTCAGCAGGCATCCCCCAGGCTGGCGGAGAGGC TGAAAATCTGAACAGCTCTTATTTCTCTTCACAGGACGTGCTGAGAAGCAACCTGGTGCAGGTGAAGGTGGAGAA GGAGAGCAGTCTGCTCCCCTACGTCTCCAACATCCTGAGCCCCGCGGGCCAGATCTTCATGTGCCCCCTGTGCAA CAAGCCCGCCGCCGATGTCAACGTGCCCACGTGCTCGCTGTGTGGGAAGACTTTCTCTTGCATGTACACCCTCAA GCGCCACGAGAGGACTCACTCGGGGGAGAAGCCCTACACATGCACCCAGTGCGGCAAGAGCTTCCAGTACTCGCA CAACCTGAGCCGCCATGCCGTGGTGCACACCCGCGAGAAGCCGCACGCCTGCAAGTGGTGCGAGCGCAGGTTCAC GCAGTCCGGGGACCTGTACAGACACATTCGCAAGTTCCACTGTGAGTTGGTGAACTCCTTGTCGGTCAAAAGCGA AGCACTGAGCTTGCCTACTGTCAGAGACTGGACCTTAGAAGATAGCTCTCAAGAACTTTGGAAA<u>TAA</u>TTTTATAT ATATATAAATAATATATATATATATATATATATAAATAGATCTCTATATAGTTGTGGTACGGTCTAAAAGCAG TCTTGTTTCCTGGAAATAAAAAGTTGGGATATTAACTTGTTTTTGCACTTTAGAATAGCATGAGAATCTCACTAA TTTAGCATTCTGATAAAAGAAACTTTAGAGCAAGTCAGAATAGAGAGGTGTTTTTCCTTTGAGGGGATAGGGGAA GTAAGCCAATAAGAACCTTTTAAACAAATCGTCCTGTCACAAAATGCTTTCATATGGCTTAATTTTGTCAACACT CCCTCCAGTTTTATTAGCCTCTTTATATGTCTCAAATTGCATGAATTTTTTCTGGCTGTTGGAAACCTGAATGCT TTTAGACCCAAATGGAAAATTTCTGAAATGCTGGATTATCTATTTTTAAACAAGCAGTTGACTTAAAAACTTTCTG TGGCAACTTCTGGTTTTCTGACAGTTCCCAGTGAGAGAAATGCTGAAAGTACACTGGGATCACTGGGACACTGTC TTATGAAGGTTTGCTTGGGATGAAAAAGGATATTGCAGCTTCAGCAGTGTTGAACTGTGTTTAAAAATGTGAA TTACTGTTATTGTATACTGTAATTGATTACATGGGCTGGGGGGGTGTCAAAGAACTTGACAGGTTGTGTTGATGC TCTTAGTTGAGTCTTGAAAAGTAAATATTAACGCTACAGAAATGCATGAGTTTTCAATATATTTTTTTGTCTTTGT TTGCATTGTATAACTTTAACGAGTGAGTTTAAAATTATTTAATTTCCTTAGAAAAATAGCACCATTTGGAAAAAA AAACTGGTGTTATGAAGAACGTAAATGCACTGTTTTTATTTTTATTTTATATAAATTTAAATTGACTTTCCCACTG TCTTTAAGTTGAAACTGTTAAGCTGAATAAAAACTTAAGCTGCAAATTGATAACTTCGCTACATAACAAGGAAAA TATAAATGTTTACAAACAGCTTAAAGATTTGCATGTGCAGTGTGCATTTATAACAAACTTCTAATTGCACAAAAC CCATGCCAGCTCAGAGTTTAGGTGTACACATTTACCCAGTTGAGCGTTCTTAGAATAACTACTGCACAAGTTGAC ACTOTOCOCCOCCACCACCACCCCCCAACTCATGAAAAGATTCTATGGACTGAAAAAGCCCCAGGCTGA AAGGACTGGACTGCCTTGATTGACATGGGGAAGGGGGTTAGTAGACTATGTGGATTGCGGCAGCAGAGGCTGCAG

1106/2682 FIGURE 1006B

1107/2682 FIGURE 1007

MEFPDHSRHLLQCLSEQRHQGFLCDCTVLVGDAQFRAHRAVLASCSMYFHLFYKDQLDKRDIVHLNSDIVTAPAF ALLLEFMYEGKLQFKDLPIEDVLAAASYLHMYDIVKVCKKKLKEKATTEADSTKKEEDASSCSDKVESLSDGSSH IAGDLPSDEDEGEDEKLNILPSKRDLAAEPGNMWMRLPSDSAGIPQAGGEAEPHATAAGKTVASPCSSTESLSQR SVTSVRDSADVDCVLDLSVKSSLSGVENLNSSYFSSQDVLRSNLVQVKVEKEASCDESDVGTNDYDMEHSTVKES VSTNNRVQYEPAHLAPLREDSVLRELDREDKASDDEMMTPESERVQVEGGMESSLLPYVSNILSPAGQIFMCPLC NKVFPSPHILQIHLSTHFREQDGIRSKPAADVNVPTCSLCGKTFSCMYTLKRHERTHSGEKPYTCTQCGKSFQYS HNLSRHAVVHTREKPHACKWCERRFTQSGDLYRHIRKFHCELVNSLSVKSEALSLPTVRDWTLEDSSQELWK

1108/2682 FIGURE 1008

TGCTTCACCTTCCTGCGAAGGAAATTCCAGAGCCTGTATTTAAGCTACCTAGGCTTTTACACTCCCTTTATTGCC $\tt TTTCCAAATAGTATCTCATTTGGTGTACTC\underline{TAG} \tt TGTCCTATACCTCTTGGAAACGAAAGAGGGCCCAACCTACAA$ ACAATGCAGTAGCCACTTGGCTTGTGGAATTTACTGAAGGCTATTTCCTGTAACTTGCTAGTTAACTTAGTTTTG TATTTCAGGCAGAGGTGCGCTCTGTAATGTTGGGCCTTTGACTTCACAGTACTGGAGAGCTGTTCACACAGATGT TTAGACCTTTCTCTCTCTCTCTTTTCTTCTTCTCAACAACTCTTTCACAGAGGCAGTCATTTTGAAAGGTTG GCAGATTAAGAATGCATATGTCCCAATCCACTTCTATAGGAGTTTAATCATATTCACATGAGTAAAATGATGGAA TGTAATATATGTCTGGAGAGCTATTTATAAGAAATTTAAGAGGATTGTTTTGTTTTCCTTTATTAAAGATTTAAG ACGATTAGCTGTAGCCAAATTATGTGGTTACGTTTTGCTACATTAGAATTTGAAAATGCAATATGTGTGGTAAAT CTACTGTTTGAAATTTATAATGGTCTCTGATATGATTCGAATTTTGGTAACTTTTGAAAGTTATTTTCCCCCTTT AGTCATGGATTTCTATTTGTTTTTAATGTTAATTTTTCTAGAAAGCATCTGAATTGACTAGGCTTTTCCTATAT AAAAACTCAAAACTTGTTAACTCTGTACTTTAATAAAATTTAAAATTAAAACTGTGTTGTTTTTTTCTCTTCTG CTAGATACATATAAATTAAAGTACTCAAGTTAGTTGTTTTGCAGAGATGTTGCCTTCAGATGTTAATCAGGTCT CTCAAGTTTCATGGAGTCTATGCTGATCCTTTAATTGACAAATAAAAGATATATCTGTGGTGTGCAAC

1109/2682 FIGURE 1009

GVNHCTQPTLCLFKMMYLFNFCHHWCFTFLRRKFQSLYLSYLGFYTPFIAFPNSISFGVL

1110/2682 FIGURE 1010A

 $\tt CCGGGGCCCCATCATGTTCTCCAGGAAGAACGAGAGCTCATGAAAACCCCTTCCATCTCGAAAAAGAACCGCGC$ CGCCAGCGCGGCTGGCTTCCCCCTGTCGGGTGCTGCCTCCTGGACACTGGGCCGGAGCCACCGGAGCCCACTGAC AGCCGCCAGCCGGGCGAGCTGCCCACCGAGGGTGCCGGCCCGGACGTCGTCGAGGACATCTCCCATCTGCTGGC GGACGTGGCCCGCTTCGCTGAGGGCCCTTGAGAAACTTAAGGAGTGTGTTGCGTGACGACCTCCTTGAGGCCCG $\tt CCGCCCGCGGGCCCACGAGTGCCTGGGTGAGGCTCTGCGTGTCATGCATCAGATCATCTCCAAGTACCCGCTGCT$ GAACACCGTGGAGACGCTCACCGCAGCCGGCACCCTCATTGCCAAGGTCAAAGCCTTCCATTATGAGAGCAACAA TGATCTGGAGAAACAGGAGTTCGAGAAGGCCCTGGAGACGATTGCTGTGGCCTTCAGTAGCACAGTGTCCGAGTT CCTCATGGGTGAAGTGGACAGCAGCACCCTCCTAGCAGTGCCTCCTGGGGACTCGAGCCAGTCCATGGAAAGCCT GGACGTGCTGCTACAGCGCTGTGAGGGGGGGCGTGGATGCCGCACTGCTGTATGCCAAGAACATGGCCAAGTACAT GAAGGACCTCATCAGCTACCTGGAGAAGCGGACGACGCTGGAGATGGAGTTTGCCAAGGGCCTGCAGAAGATCGC TCACAACTGCAGACAGAGCGTCATGCAGGAGCCCCACATGCCGCTCCTGTCCATCTACTCGCTGGCCCTGGAGCA GGACCTGGAGTTCGGCCACAGCATGGTGCAGGCGGTGGGCACCTTGCAGACCCAGACCTTCATGCAGCCCCTGAC CCTGCGGCGGCTTGAACACGAGAAGCGCAGGAAGGAGATCAAGGAGGCCTGGCACCGTGCCCAGAGGAAGCTGCA AGAGGCGGAGTCCAACCTGCGCAAGGCCAAGCAGGGTTACGTGCAGCGCTGCGAGGACCACGACAAGGCTCGCTT CAAGCGGCGGCGGCTGGAGGAGGGCCAAGAACAAGGCGGAGGAAGCTATGGCCACCTACCGCACCTGCGTGGC CGACGCGAAGACGCAGAAGCAGGAGCTGGAGGATACCAAGGTGACGGCGCTGCGGCAGATCCAGGAGGTCATCCG GCAGAGCGACCAAACCATCAAGTCGGCCACGATCTCCTACTACCAGATGATGCATATGCAGACGGCGCCGCTGCC CGTGCACTTCCAGATGCTGTGTGAGAGCAGCAAGCTGTATGACCCAGGCCAGCAGTACGCCTCCCACGTGCGCCA GCTGCAGCGGACCAGGAGCCCGATGTGCACTACGACTTTGAGCCCCACGTCTCCGCCAACGCCTGGTCCCCCGT CATGCGTGCCCGGAAGAGCAGCTTCAACGTGAGTGATGTGGCGGGCCGGAGGCTGCCGGGAGCCCCCCAGAAGA AGGCGGGTGCACTGAGGGCACACCTGCCAAGGACCACAGGGCCGGGCGAGGACACCAGGTTCACAAGTCATGGCC GCTCTCGATCTCAGACTCGGACAGTGGGCTGGACCCCGGCCCTGGCGCAGGGGACTTTAAGAAGTTCGAGCGGAC GTCATCCAGTGGTACCATGTCGTCCACGGAGGAGCTGGTGGACCCAGACGGTGGAGCCGGGGCTTCAGCCTTTGA GCAGGCTGACCTCAACGGCATGACCCCCGAGCTGCCGGTGGCCCAGTGGACCGTTCCGCCACGAGGGGGCT GTCCAAGGCGGCCCGTACTCACCGGCTCCGGAAGCTCCGCACGCCCGAAGTGCCGCGAGTGCAACAGCTACGT CTACTTCCAGGGTGCTGAGTGTGAAGAGTGCTGCCTGGCCTGCCACAAGAAATGTCTGGAGACGCTGGCCATACA GTGCGGGCACAAGAAGCTGCAAGGCCGCCTGCAGCTGTTCGGCCAGGACTTCAGCCACGCGGCCCGCAGCGCCCC CGACGGCGTGCCCTTCATCGTCAAGAAGTGCGTCTGCGAGATCGAGCGGCGGCGGCGCTGCGCACCAAGGGCATCTA CCGGGTCAATGGGGTAAAGACACGCGTGGAGAAGCTGTGCCAGGCCTTCGAGAACGGCAAGGAGCTGGTCGAGCT GTCGCAGGCCTCGCCCCACGACATCAGCAACGTCCTCAAGCTCTACCTGCGTCAGCTTCCCGAGCCGCTCATCTC CTTCCGCCTCTACCACGAGCTCGTAGGGCTGGCCAAGGACAGCCTGAAGGCAGAGGCCGAGGCCAAGGCGGCGTC GGACCTGCCGCCTGAGAACCGGGCCTCGCTGCAGTACCTGCTGCGCTCACCTACGCAGGATCGTGGAGGTGGAGCA GGACAACAAGATGACCCCGGGAACCTGGGCATCGTGTTCGGGCCCACGCTGCTTCGGCCACGGCCCACCGAGGC CACCGTGTCCCTCTCCTCCTGGTGGATTATCCCCATCAGGCCCGCGTCATCGAGACTCTCATCGTCCACTACGG ${\tt CCTGGTCTTCGAGGAGGAGCCGGAGGAGACCCCCGGGGGCCAGGACGAGTCATCCAACCAGCGAGCTGAGGTAGT}$ CGTCCAGGTGCCGTACCTGGAGGCGGGCGAGGCGGTGGTCTACCCGCTGCAGGAGGCGGCGGCGGACGGGTGCAG AGAATCCCGAGTTGTGTCCAACGATTCGGACTCGGACCTAGAGGAGGCCTCCGAGCTGCTGTCCTCATCGGAGGC CAGTGCCTTGGGCCACCTCAGCTTCCTGGAGCAGCAGCAGAGCGAGGCCAGCCTAGAGGTGGCTTCTGGCAGCCA GCTCTCAGGATTCAACACCAACCAGTCCAACAACGTGCTGCAGGCCCCACTGCCCCCCATGAGGCTCCGTGGCGG GCGGATGACACTGGGCTCCTGCAGGGAAAGGCAGCCGGAATTCGTG<u>TGA</u>GCTGGGGTGGGGCTGGGACCACAGGT GGCTTCTCTCTTGCCTGCTCCTGTCCCTCCAGCACGTCCCCTGCACCACGGCATAGCTTAGGTGCGCCGTCCTGG

FIGURE 1010B

FIGURE 1011

QCGPEAASAGSCSAETPSPPPRAPGRGPIMFSRKKRELMKTPSISKKNRAGSPSPQPSGELPRKDGADAVFPGPS LEPPAGSSGVKATGTLKRPTSLSRHASAAGFPLSGAASWTLGRSHRSPLTAASPGELPTEGAGPDVVEDISHLLA DVARFAEGLEKLKECVLRDDLLEARRPRAHECLGEALRVMHQIISKYPLLNTVETLTAAGTLIAKVKAFHYESNN DLEKQEFEKALETIAVAFSSTVSEFLMGEVDSSTLLAVPPGDSSQSMESLYGPGSEGTPPSLEDCDAGCLPAEEV DVLLQRCEGGVDAALLYAKNMAKYMKDLISYLEKRTTLEMEFAKGLQKIAHNCRQSVMQEPHMPLLSIYSLALEQ DLEFGHSMVQAVGTLQTQTFMQPLTLRRLEHEKRRKEIKEAWHRAQRKLQEAESNLRKAKQGYVQRCEDHDKARF $\verb|LVAKAEEEQAGSAPGAGSTATKTLDKRRRLEEEAKNKAEEAMATYRTCVADAKTQKQELEDTKVTALRQIQEVIR|$ QSDQTIKSATISYYQMMHMQTAPLPVHFQMLCESSKLYDPGQQYASHVRQLQRDQEPDVHYDFEPHVSANAWSPV MRARKSSFNVSDVARPEAAGSPPEEGGCTEGTPAKDHRAGRGHQVHKSWPLSISDSDSGLDPGPGAGDFKKFERT SSSGTMSSTEELVDPDGGAGASAFEQADLNGMTPELPVAVPSGPFRHEGLSKAARTHRLRKLRTPAKCRECNSYV YFQGAECEECCLACHKKCLETLAIQCGHKKLQGRLQLFGQDFSHAARSAPDGVPFIVKKCVCEIERRALRTKGIY RVNGVKTRVEKLCQAFENGKELVELSQASPHDISNVLKLYLRQLPEPLISFRLYHELVGLAKDSLKAEAEAKAAS RGRQDGSESEAVAVALAGRLRELLRDLPPENRASLQYLLRHLRRIVEVEQDNKMTPGNLGIVFGPTLLRPRPTEA TVSLSSLVDYPHQARVIETLIVHYGLVFEEEPEETPGGQDESSNQRAEVVVQVPYLEAGEAVVYPLQEAAADGCR ESRVVSNDSDSDLEEASELLSSSEASALGHLSFLEQQQSEASLEVASGSHSGSEEQLEATAREDGDGDEDGPAQQ LSGFNTNQSNNVLQAPLPPMRLRGGRMTLGSCRERQPEFV

FIGURE 1012

GGGGCAGGGGGCTCAGGAGCTCTTGGTGGGGCGGGTCCGCTTCCTCTTCACCATCACAGGCTTCTGGCTGCGCAG GATGGCGCTGGCCTGCGGATGGCTGCCATGCGCAGGTCGGGGCGGTACTTGTTCTTGCGGATCATGTGTCTGAT GCTGCTGAGCGTGGCGCGAGCATTCTTGTTGATGGTGGTCCGCACATAGGAGGTGGCAGGCTTCCGCTGGCCGGA TCTCCGCTTAATGACCACCACGACACCTTTGCCGTCGGCTGCCGGCTCCACGCCCACAGTCTTGCCGTGAATCAG ${\tt TCCGTTGTAGCGGAAGGAATTGCGGGCCTTCAAGTTATTGGGCTCAGTGCTGATGCTTATTCCTCTTGAT}$ ${\tt CAGGAAACTGGAGCAGTTCCGCACGACCATCCATTGCAGATGCGCAGACATGGCGGCGGCTCCCTTCGCAGCGGC}$ GACCTGACCTTCAGCGCCTCGGCTCCAGCGCCCTCCAGGAAGTTCTTCGTTGGGGGAAACTGGAAGA TGGTTTGTGCTCCCCCTACTGCCTATATCGACTTCGCCCGGCAGAAGCTAGATCCCAAGATTGCTGTGGCTGCGC AGAACTGCTACAAAGTGACTAATGGGGGCTTTTACTGGGGAGATCAGCCCTGGCATGATCAAAGACTGCGGAGCCA CGTGGGTGGTCCTGGGGCACTCAGAGAAGGCATGTCTTTGGGGAGTCAGATGAGCTGATTGGGCAGAAAGTGG CCCATGCTCTGGCAGAGGGACTCGGAGTAATCGCCTGCATTGGGGAGAAGCTAGATGAAAGGGAAGCTGGCATCA CTGAGAAGGTTGTTTTCGAGCAGACAAAGGTCATCGCAGATAACGTGAAGGACTGGAGCAAGGTCGTCCTGGCCT ATGAGCCTGTGTGGGCCATTGGTACTGGCAAGACTGCAACACCCCAACAGGCCCAGGAAGTACACGAGAAGCTCC GAGGATGGCTGAAGTCCAACGTCTCTGATGCGGTGGCTCAGAGCACCCGTATCATTTATGGAGGCTCTGTGACTG AATTCGTGGACATCATCAATGCCAAACAA<u>TGA</u>GCCCCATCCATCTTCCCTACCCTTCCTGCCAAGCCAGGGACTA TCATCCAAACTGTATCTTCCTTTACTGTTTATATCTTCACCCTGTAATGGTTGGGACCAGGCCAATCCCTTCTCC ACTTACTATAATGGTTGGAACTAAACGTCACCAAGGTGGCTTCTCCTTGGCTGAGAGATGGAAGGCGTGGTGGGA TTTGCTCCTGGGTTCCCTAGGCCCTAGTGAGGGCAGAAGAAACCATCCTCTCCCTTCTTACACCGTGAGGCCA AGATCCCCTCAGAAGGCAGGAGTGCTGCCCTCTCCCATGGTGCCCTCTGTGCTGTGTATGTGAACCACCC

1114/2682 FIGURE 1013

MAPSRKFFVGGNWKMNGRKQSLGELIGTLNAAKVPADTEVVCAPPTAYIDFARQKLDPKIAVAAQNCYKVTNGAF TGEISPGMIKDCGATWVVLGHSERRHVFGESDELIGQKVAHALAEGLGVIACIGEKLDEREAGITEKVVFEQTKV IADNVKDWSKVVLAYEPVWAIGTGKTATPQQAQEVHEKLRGWLKSNVSDAVAQSTRIIYGGSVTGATCKELASQP DVDGFLVGGASLKPEFVDIINAKQ

1115/2682 FIGURE 1014A

ATGCCCAAGTATGGAGAACATGAAGCCAGTCCTGACAATGGGCAGAACGAATTCAGTGATATCATTAAGTCCAGA TCTGATGAACACAATGACGTACAGAAGAAAACCTTTACCAAATGGATAAATGCTCGATTTTCAAAGAGTGGGAAA ACATCACTGCCAAAGGAACGTGGTTCCACAAGGGTACATGCCTTAAATAACGTCAACAGAGTGCTGCAGGTTTTA TTACTTTGGAGCATCATTTTGCACTGGCAGGTGAAAGATGTCATGAAGGATGTCATGTCGGACCTGCAGCAGACG AACAGTGAGAAGATCCTGCTCAGCTGGGTGCGTCAGACCACCAGGCCCTACAGCCAAGTCAACGTCCAACTTC ACCACCAGCTGGACAGATGGACTCGCCTTTAATGCTGTCCTCCACCGACATAAACCTGATCTCTTCAGCTGGGAT AAAGTTGTCAAAATGTCACCAATTGAGAGACTTGAACATGCCTTCAGCAAGGCTCAAACTTATTTGGGAATTGAA AAGCTGTTAGATCCTGAAGATGTTGCCGTTCGGCTTCCTGACAAGAAATCCATAATTATGTATTTAACATCTTTG TTTGAGGTGCTACCTCAGCAAGTCACCATAGACGCCATCCGTGAGGTAGAGACACTCCCAAGGAAATATAAAAAA GAATGTGAAGAAGAGGCAATTAATATACAGAGTACAGCGCCTGAGGAGGAGCATGAGAGTCCCCGAGCTGAAACT CCCAGCACTGTCACTGAGGTCGACATGGATCTGGACAGCTATCAGATTGCGTTGGAGGAAGTGCTGACCTGGTTG CTTTCTGCTGAGGACACTTTCCAGGAGCAGGATGATATTTCTGATGATGTTGAAGAAGTCAAAGACCAGTTTGCA ACCCATGAAGCTTTTATGATGGAACTGACTGCACCAGAGCAGTGTGGGCAGCGTCCTGCAGGCAACCAA CTGATAACACAAGGAACTCTGTCAGACGAAGAAGAATTTGAGATTCAGGAACAGATGACCCTGCTGAATGCTAGA TGGGAGGCTCTTAGGGTGGAGAGTATGGACAGACAGTCCCGGCTGCACGATGTGCTGATGGAACTGCAGAAGAAG CAACTGCAGCAGCTCTCCGCCTGGTTAACACTCACAGAGGAGCGCATTCAGAAGATGGAAACTTGCCCCCTGGAT GATGATGTAAAATCTCTACAAAAGCTGCTAGAAGAACATAAAAGTTTGCAAAGTGATCTTGAGGCTGAACAGGTG AAAGTAAATTCACTAACTCACATGGTGGTCATTGTTGATGAAAACAGTGGTGAGAGCGCTACAGCTATCCTAGAA GACCAGTTACAGAAACTTGGTGAGCGCTGGACAGCAGTATGCCGTTGGACTGAAGAACGCTGGAATAGGTTACAA GAAATCAATATATTGTGGCAGGAATTATTGGAAGAACAGTGCTTGTTGAAAGCTTGGTTAACCGAAAAAGAAGAG GCTTTAAATAAAGTCCAGACAAGCAACTTCAAAGACCAAAAGGAACTAAGTGTCAGTGTTCGACGTCTGGCTATT CTTGATAATTCCAAGGCATCTAAGAAGATCAACAGTGACTCAGAGGAACTGACTCAAAGATGGGATTCTTTGGTT CAGAGACTAGAAGATTCCTCCAACCAGGTGACTCAGGCTGTAGCAAAGCTGGGGATGTCTCAGATTCCTCAGAAG GACCTTTTGGAGACTGTTCGTGTAAGAGAACAAGCAATTACAAAAAAATCTAAGCAGGAACTGCCTCCTCCTCCT CCCCCAAAGAAGAAGACAGATCCATGTGGATATTGAAGCTAAGAAAAAGTTTGATGCTATAAGTGCAGAGCTGTTG AACTGGATTTTGAAATGGAAAACTGCCATTCAGACCACAGAGATAAAAGAGTATATGAAGATGCAAGACACTTCC ACTGGACAAATCCTTGTGGAGCAAATGGGAAAAGAAGCCCTTCCTACTGAAGAAATAAAAAATGTTCTGGAGAAG AATGCTTATTTCAAGCAGCTTGATGAGCTTGAAAAGGTCATCAAGACAAAGGAGGAGTGGGTAAAACACACTTCC ATTTCTGAATCTTCCCGGCAGTCCTTGCCAAGCTTGAAGGATTCCTGTCAGCGGGAATTGACAAATCTTCTTGGC CTTCACCCCAAAATTGAAATGGCTCGTGCAAGCTGCTCGGCCCTGATGTCTCAGCCTTCTGCCCCAGATTTTGTC CAGCGGGGCTTCGATAGCTTTCTGGGCCGCTACCAAGCTGTACAAGAGGCTGTAGAGGATCGTCAACAACATCTA GAGAATGAACTGAAGGGCCAACCTGGACATGCATATCTGGAAACATTGAAAACACTGAAAGATGTGCTAAATGAT TCAGAAAATAAGGCCCAGGTGTCTCTGAATGTCCTTAATGATCTTGCCAAGGTGGAGAAGGCCCTGCAAGAAAAA AAGACCCTTGATGAAATCCTTGAGAATCAGAAACCTGCATTACATAAACTTGCAGAAGAAACAAAGGCTCTGGAG AAAAATGTTCATCCTGATGTAGAAAAATTATATAAGCAAGAATTTGATGATGTGCAAGGAAAGTGGAACAAGCTA AAGGTCTTGGTTTCCAAAGATCTACATTTGCTTGAGGAAATTGCTCACACTCAGAGCTTTTGAGGCCGATTCA ACAGTCATTGAGAAGTGGATGGATGGCGTGAAAGACTTCTTAATGAAACAGCAGGCTGCCCAAGGAGACGACGCA GGTCTACAGAGGCAGTTAGACCAGTGCTCTGCATTTGTTAATGAAATAGAAACAATTGAATCATCTCTGAAAAAAC ATGAAGGAAATAGAGACTAATCTTCGAAGTGGTCCAGTTGCTGGAATAAAAACTTGGGTGCAGACAAGACTAGGT GACTACCAAACTCAACTGGAGAAACTTAGCAAGGAGATCGCTACTCAAAAAAAGTAGGTTGTCTGAAAAGTCAAGAA AAAGCTGCGAACCTGAAGAAGACTTGGCAGAGATGCAGGAATGGATGACCCAGGCCGAGGAAGAATATTTGGAG CGGGATTTTGAGTACAAGTCACCAGAAGAGCTTGAGAGTGCTGTGGAAGAGATGAAGAGGGCAAAAGAGGATGTG TTGCAGAAGGAGGTGAGAGTGAAGATTCTCAAGGACAACATCAAGTTATTAGCTGCCAAGGTGCCCTCTGGTGGC

1116/2682 FIGURE 1014B

CAGGAGTTGACGTCTGAGCTGAATGTTGTGCTGGAGAATTTACCAACTTCTTTGTAATAGAATTCGAGGAAAGTGC CACACGCTAGAGGAGGTCTGGTCTTGTTGGATTGAACTGCTTCACTATTTGGATCTTGAAACTACCTGGTTAAAC GGGATCCTGGATGATATAATCAGTGAGAAACTGGAGGCTTTCAACAGCCGATATGAAGATCTAAGTCACCTGGCA GAGAGCAAGCAGATTTCTTTGGAAAAGCAACTCCAGGTGCTGCGGGAAACTGACCAGATGCTTCAAGTCTTGCAA GAAGCTCAGAAAATCCAAGCAGAGATCTCAGCCCATGAGCTAACCCTAGAGGAGTTGAGAAAAATATGCGTTCT GAGGTGTCCACAAAGTTCCAGCTTTTCCAGAAGCCAGCTAACTTCGAGCAGCGCATGCTGGACTGCAAGCGTGTG CTGGATGGCGTGAAAGCAGAACTTCACGTTCTGGATGTGAAGGACGTAGACCCTGACGTCATACAGACGCACCTG GACAAGTGTATGAAACTGTATAAAACTTTGAGTGAAGTCAAACTTGAAGTGGAAACTGTGATTAAAACAGGAAGA AATGACCTGGGCGCACAGGTGACAGAAGGAAAACAGGATCTGGAAAGAGCATCACAGTTGGCCCGGAAAATGAAG AAAGAGGCTGCTTCTCTCTGAATGGCTTTCTGCTACTGAAACTGAATTGGTACAGAAGTCCACTTCAGAAGGT CTGCTTGGTGACTTGGATACAGAAATTTCCTGGGCTAAAAATGTTCTGAAGGATCTGGAAAAAGAGAAAAGCTGAT CTCTGCGTCCTTAACGCTGGGTGGAGCCGAGTTCGTACCTGGACTGAAGATTGGTGCAATACCTTGATGAACCAT CAGAACCAGCTAGAAATATTTGATGGGAACGTGGCTCACATAAGTACCTGGCTTTATCAAGCTGAAGCTCTATTG GATGAAATTGAAAAGAAACCAACAAGTAAACAGGAAGAAATTGTGAAGCGTTTAGTATCTGAGCTGGATGATGCC AACCTCCAGGTTGAAAATGTCCGCGATCAAGCCCTTATTTTGATGAATGCCCGTGGAAGCTCAAGCAGGGAGCTT GTAGAACCAAAGTTAGCTGAGCTGAATAGGAACTTTGAAAAGGTGTCTCAACATATCAAAAGTGCCAAATTGCTA ATTGCTCAGGAACCATTATACCAATGTTTGGTCACCACTGAAACATTTGAAACTGGTGTGCCTTTCTCTGACTTG GAAAAATTAGAAAATGACATAGAAAATATGTTAAAATTTGTGGAAAAACACTTGGAATCCAGTGATGAAGATGAA AAGATGGATGAGGAGAGTGCCCAGATTGAGGAAGTTCTACAAAGAGAGAAATGTTACATCAACCTATGGAA GATAATAAAAAGAAAGATCCGTTTGCAATTATTACTTTTGCATACTAGATACAACAAAATTAAGGCAATCCCT ATTCAACAGAGGAAAATGGGTCAACTTGCTTCTGGAATTAGATCATCACTTCTTCCTACAGATTATCTGGTTGAA ATTAACAAAATTTTACTTTGCATGGATGATGTTGAATTATCGCTTAATGTTCCAGAGCTCAACACTGCTATTTAC GAAGACTTCTCTTTTCAGGAAGACTCTCTGAAGAATATCAAAGACCAACTGGACAAACTTGGAGAGCAGATTGCA GTCATTCATGAAAAACAGCCAGATGTCATCCTTGAAGCCTCTGGACCTGAAGCCATTCAGATCAGAGATACACTT ACTCAGCTGAATGCAAAATGGGACAGAATTAATAGAATGTACAGTGATCGGAAAGGTTGTTTTGACAGGGCAATG GAAGAATGGAGACAGTTCCATTGTGACCTTAATGACCTCACACAGTGGATAACAGAGGCTGAAGAATTACTGGTT GATACCTGTGCTCCAGGTGGCAGCCTGGACTTAGAGAAAGCCAGGATACATCAGCAGGAACTTGAGGTGGGCATC AGCAGCCACCAGCCCAGTTTTGCAGCACTAAACCGAACTGGGGATGGGATTGTGCAGAAACTCTCCCAGGCAGAT GGAAGCTTCTTGAAAGAAAAACTGGCAGGTTTAAACCAACGCTGGGATGCAATTGTTGCAGAAGTGAAGGATAGG CAGCCAAGGCTAAAAGGAGAAAGTAAGCAGGTGATGAAGTACAGGCATCAGCTAGATGAGATTATCTGTTGGTTA ACAAAGGCTGAGCATGCTATGCAAAAGAGATCAACCACCGAATTGGGAGAAAACCTGCAAGAATTAAGAGACTTA ACTCAAGAAATGGAAGTACATGCTGAAAAACTCAAATGGCTGAATAGAACTGAATTGGAGATGCTTTCAGATAAA AGTCTGAGTTTACCTGAAAGGGATAAAATTTCAGAAAGCTTAAGGACTGTAAATATGACATGGAATAAGATTTGC AGAGAGGTGCCTACCACCCTGAAGGAATGCATCCAGGAGCCCAGTTCTGTTTCACAGACAAGGATTGCTGCTCAT CCTAATGTCCAAAAGGTGGTGCTAGTATCATCTGCGTCAGATATTCCTGTTCAGTCTCATCGTACTTCGGAAATT TCCAACATTGTCACTGTTGGGGATGTAGAAGAGATCAATAAGACCGTTTCCCGAATGAAAATTACAAAGGCTGAC TTAGAACAGCGCCATCCTCAGCTGGATTATGTTTTTACATTGGCACAGAATTTGAAAAATAAAGCTTCCAGTTCA GATATGAGAACAGCAATTACAGAAAAATTGGAAAGGGTCAAGAACCAGTGGGATGGCACCCAGCATGGCGTTGAG CTAAGACAGCAGCAGCTTGAGGACATGATTATTGACAGTCTTCAGTGGGATGACCATAGGGAGGAGACTGAAGAA GATAACCAAATACTGCTTCAAGAACTGGGTCCTGGAGATGGTATCGTCATGGCGTTCGATAACGTCCTGCAGAAA

FIGURE 1014C

AATCTCAAACAAAGTATTGCTGACAGACAGAACGCCTTGGAGGCTGAGTGGAGGACGGTGCAGGCCTCTCGCAGA GATCTGGAAAACTTCCTGAAGTGGATCCAAGAAGCAGAGACCACAGTGAATGTGCTTGTGGATGCCTCTCATCGG GAGAATGCTCTTCAGGATAGTATCTTGGCCAGGGAACTCAAACAGCAGATGCAGGACATCCAGGCAGAAATTGAT GCCCACATGACATATTTAAAAGCATTGACGGAAACAGGCAGAAGATGGTAAAAGCTTTGGGAAATTCTGAAGAG GCTACTATGCTTCAACATCGACTGGATGATATGAACCAAAGATGGAATGACTTAAAAGCAAAATCTGCTAGCATC AGGGCCCATTTGGAGGCCAGCGCTGAGAAGTGGAACAGGTTGCTGATGTCCTTAGAAGAACTGATCAAATGGCTG AATATGAAAGATGAAGAGCTTAAGAAACAAATGCCTATTGGAGGAGATGTTCCAGCCTTACAGCTCCAGTATGAC CATTGTAAGGCCCTGAGACGGGAGTTAAAGGAGAAAGAATATTCTGTCCTGAATGCTGTCGACCAGGCCCGAGTT TTCTTGGCTGATCAGCCAATTGAGGCCCCTGAAGAGCCAAGAAGAAACCTACAATCAAAAACAGAATTAACTCCT GAGGAGAGACCCAAAAGATTGCCAAAGCCATGCGCAAACAGTCTTCTGAAGTCAAAGAAAAATGGGAAAGTCTA AATGCTGTAACTAGCAATTGGCAAAAGCAAGTGGACAAGGCATTGGAGAAACTCAGAGACCTGCAGGGAGCTATG GATGACCTGGACGCTGACATGAAGGAGGCAGAGTCCGTGCGGAATGGCTGGAAGCCCGTGGGAGACTTACTCATT GACTCGCTGCAGGATCACATTGAAAAAATCATGGCATTTAGAGAAGAAATTGCACCAATCAACTTTAAAGTTAAA ACGGTGAATGATTTATCCAGTCAGCTGTCTCCACTTGACCTGCATCCCTCTCTAAAGATGTCTCGCCAGCTAGAT GACCTTAATATGCGATGGAAACTTTTACAGGTTTCTGTGGATGATCGCCTTAAACAGCTTCAGGAAGCCCACAGA GATTTTGGACCATCCTCTCAGCATTTTCTCTCTACGTCAGTCCAGCTGCCGTGGCAAAGATCCATTTCACATAAT AAAGTGCCCTATTACATCAACCATCAAACACAGACCACCTGTTGGGACCATCCTAAAATGACCGAACTCTTTCAA TCCCTTGCTGACCTGAATAATGTACGTTTTTCTGCCTACCGTACAGCAATCAAAAATCCGAAGACTACAAAAAAGCA CTATGTTTGGATCTCTTAGAGTTGAGTACAACAAATGAAATTTTCAAACAGCACAAGTTGAACCAAAATGACCAG CTCCTCAGTGTTCCAGATGTCATCAACTGTCTGACAACAACTTATGATGGACTTGAGCAAATGCATAAGGACCTG GTCAACGTTCCACTCTGTGTTGATATGTGTCTCAATTGGTTGCTCAATGTCTATGACACGGGTCGAACTGGAAAA TTTAAGGAAGTTGCGGGGCCGACAGAAATGTGTGACCAGAGGCAGCTGGGCCTGTTACTTCATGATGCCATCCAG ATCCCCGGCAGCTAGGTGAAGTAGCAGCTTTTGGAGGCAGTAATATTGAGCCTAGTGTTCGCAGCTGCTTCCAA CAGAATAACAATAAACCAGAAATAAGTGTGAAAGAGTTTATAGATTGGATGCATTTGGAACCACAGTCCATGGTT TGGCTCCCAGTTTTACATCGAGTGGCAGCAGCGGAGACTGCAAAACATCAGGCCAAATGCAACATCTGTAAAGAA TGTCCAATTGTCGGGTTCAGGTATAGAAGCCTTAAGCATTTTAACTATGATGTCTGCCAGAGTTGTTTCTTTTCG GGTCGAACAGCAAAAGGTCACAAATTACATTACCCAATGGTGGAATATTGTATACCTACAACATCTGGGGAAGAT GTACGAGACTTCACAAAGGTACTTAAGAACAAGTTCAGGTCGAAGAAGTACTTTGCCAAACACCCTCGACTTGGT TACCTGCCTGTCCAGACAGTTCTTGAAGGTGACAACTTAGAGACTCCTATCACACTCATCAGTATGTGGCCAGAG CACTATGACCCCTCACAATCTCCTCAACTGTTTCATGATGACACCCATTCAAGAATAGAACAATATGCCACACGA CTGGCCCAGATGGAAAGGACTAATGGGTCTTTTCTCACTGATAGCAGCTCCACCACAGGAAGTGTGGAAGACGAG CACGCCCTCATCCAGCAGTATTGCCAAACACTCGGAGGAGAGTCCCCAGTGAGCCCAGCCGCAGAGCCCAGCTCAG ATCCTGAAGTCAGTAGAGAGGGAAGAACGTGGAGAACTGGAGGAGCATCATTGCTGACCTGGAGGAAGAACAAAGA AATCTACAGGTGGAGTATGAGCAGCTGAAGGACCAGCACCTCCGAAGGGGGCTCCCTGTCGGTTCACCGCCAGAG TCGATTATATCTCCCCATCACACGTCTGAGGATTCAGAACTTATAGCAGAAGCAAAACTCCTCAGGCAGCACAAA GGTCGGCTGGAGGCTAGGATGCAGATTTTAGAAGATCACAATAAACAGCTGGAGTCTCAGCTCCACCGCCTCCGA CAGCTGCTGGAGCAGCCTGAATCTGATTCCCGAATCAATGGTGTTTCCCCATGGGCTTCTCCTCAGCATTCTGCA CTGAGCTACTCGCTTGATCCAGATGCCTCCGGCCCACAGTTCCACCAGGCAGCGGGAGAGGACCTGCTGGCCCCA $\verb|CCGCACGACCACCAGCACGGATCTCACGGAGGTCATGGAGCAGATTCACAGCACGTTTCCATCTTGCTGCCCAAAT| \\$ GTTCCCAGCAGGCCACAGGCAATGTGA

FIGURE 1015

MAKYGEHEASPDNGQNEFSDIIKSRSDEHNDVQKKTFTKWINARFSKSGKPPINDMFTDLKDGRKLLDLLEGLTG ${\tt TSLPKERGSTRVHALNNVNRVLQVLHQNNVELVNIGGTDIVDGNHKLTLGLLWSIILHWQVKDVMKDVMSDLQQT}$ NSEKILLSWVRQTTRPYSQVNVLNFTTSWTDGLAFNAVLHRHKPDLFSWDKVVKMSPIERLEHAFSKAQTYLGIE KLLDPEDVAVRLPDKKSIIMYLTSLFEVLPQQVTIDAIREVETLPRKYKKECEEEAINIQSTAPEEEHESPRAET PSTVTEVDMDLDSYQIALEEVLTWLLSAEDTFQEQDDISDDVEEVKDQFATHEAFMMELTAHQSSVGSVLQAGNQ LITQGTLSDEEEFEIQEQMTLLNARWEALRVESMDRQSRLHDVLMELQKKQLQQLSAWLTLTEERIQKMETCPLD DDVKSLQKLLEEHKSLQSDLEAEQVKVNSLTHMVVIVDENSGESATAILEDQLQKLGERWTAVCRWTEERWNRLQ EINILWOELLEEQCLLKAWLTEKEEALNKVQTSNFKDQKELSVSVRRLAILKEDMEMKRQTLDQLSEIGQDVGQL LDNSKASKKINSDSEELTQRWDSLVQRLEDSSNQVTQAVAKLGMSQIPQKDLLETVRVREQAITKKSKQELPPPP PPKKRQIHVDIEAKKKFDAISAELLNWILKWKTAIQTTEIKEYMKMQDTSEMKKKLKALEKEQRERIPRADELNQ TGQILVEQMGKEGLPTEEIKNVLEKVSSEWKNVSQHLEDLERKIQLQEDINAYFKQLDELEKVIKTKEEWVKHTS ISESSRQSLPSLKDSCQRELTNLLGLHPKIEMARASCSALMSQPSAPDFVQRGFDSFLGRYQAVQEAVEDRQQHL ENELKGQPGHAYLETLKTLKDVLNDSENKAQVSLNVLNDLAKVEKALQEKKTLDEILENQKPALHKLAEETKALE KNVHPDVEKLYKQEFDDVQGKWNKLKVLVSKDLHLLEEIALTLRAFEADSTVIEKWMDGVKDFLMKQQAAQGDDA GLQRQLDQCSAFVNEIETIESSLKNMKEIETNLRSGPVAGIKTWVQTRLGDYQTQLEKLSKEIATQKSRLSESQE KAANLKKDLAEMQEWMTQAEEEYLERDFEYKSPEELESAVEEMKRAKEDVLQKEVRVKILKDNIKLLAAKVPSGG QELTSELNVVLENYQLLCNRIRGKCHTLEEVWSCWIELLHYLDLETTWLNTLEERMKSTEVLPEKTDAVNEALES $\verb|LESVLRHPADNRTQIRELGQTLIDGGILDDIISEKLEAFNSRYEDLSHLAESKQISLEKQLQVLRETDQMLQVLQ|$ ${\tt ESLGELDKQLTTYLTDRIDAFQVPQEAQKIQAEISAHELTLEELRRNMRSQPLTSPESRTARGGSQMDVLQRKLR}$ EVSTKFOLFOKPANFEQRMLDCKRVLDGVKAELHVLDVKDVDPDVIQTHLDKCMKLYKTLSEVKLEVETVIKTGR HIVOKQQTDNPKGMDEQLTSLKVLYNDLGAQVTEGKQDLERASQLARKMKKEAASLSEWLSATETELVQKSTSEG LLGDLDTEISWAKNVLKDLEKRKADLNTITESSAALQNLIEGSEPILEERLCVLNAGWSRVRTWTEDWCNTLMNH ONOLEIFDGNVAHISTWLYQAEALLDEIEKKPTSKQEEIVKRLVSELDDANLQVENVRDQALILMNARGSSSREL VEPKLAELNRNFEKVSQHIKSAKLLIAQEPLYQCLVTTETFETGVPFSDLEKLENDIENMLKFVEKHLESSDEDE KMDEESAQIEEVLQRGEEMLHQPMEDNKKEKIRLQLLLLHTRYNKIKAIPIQQRKMGQLASGIRSSLLPTDYLVE INKILLCMDDVELSLNVPELNTAIYEDFSFQEDSLKNIKDQLDKLGEQIAVIHEKQPDVILEASGPEAIQIRDTL TQLNAKWDRINRMYSDRKGCFDRAMEEWRQFHCDLNDLTQWITEAEELLV

1119/2682 FIGURE 1016A

GCTGGCGGAGAGCGGCCTGCGGGCGATCGGGCCGAGCCTCGCTCAAGGAGCACCCCCGGGGCACCCTCCTGTCCG ATGGCAGCCCGGCCTGTCCAGGAATGTCGGTATGACGGTCTCTCAGAAAGGGGGTCCCCAGCCAACACGCGAGCC AGCAGACAGCTGATGACTCTCTGTCCCTTACATCTCCAAACACCGAGTCCATTTTTGTAGAAGATCCCTACACCG CCTCGCTGAGGAGTGAGATTGAGTCAGACGGCCACGAGTTTGAAGCTGAGTCCTGGAGCCTCGCCGTGGATGCAG ACCACGTGCGGACGCTCAAGATCATGCTGAAGGTGTACTCCAGGGCCCTGCAGGAGGAGCTGCAGTTCAGCAGCA AGCGCCGCCAGGAGTCCCTGGAGGAGGGCAGTGACCGGAATTATGTCATCCAGAAAATCGGCGACCTCCTGGTTC AGCAGTTTTCAGGTGAAAATGGGGAGAATGAAAGAAAGTACGGTGTGTTTTGTAGTGGCCACAATGAAGCTG TTAGTCATTACAAGTTGCTGCTTCAGCAAAACAAGAAATTTCAAAACTTGATCAAGAAAATTGGCAACTTCTCCA TCGTGCGGCGGCTTGGCGTGCAGGAGTGCATTCTCCTGGTTACACAACGCATAACCAAATACCCAGTGCTGGTGG AGCGCATCATCCAGAACACGGAAGCTGGCACTGAGGACTATGAAGACCTGACCCAGGCCTTGAACCTCATCAAAG ATATCATCTCACAAGTGGACGCCAAGGTCAGTGAGTGTGAGAAGGGCCAGCGCCTCAGGGAGATCGCAGGGAAGA TGGACCTGAAGTCTTCCAGCAAACTCAAGAACGGGCTCACCTTCCGCAAGGAAGACATGCTTCAGCGGCAGCTCC ACCTGGAGGGCATGCTATGCTGGAAGACCACATCAGGGCGCTTGAAAGATATCCTGGCTATCCTGCTGACCGACG TACTTTGCTGCTACAAGAAAAGATCAGAAATACGTCTTTGCTTCTGTGGACTCAAAGCCACCCGTCATCTCGT TACAAAAGCTCATCGTGAGGGAAGTGGCCAACGAGGAGAAAGCGATGTTTCTGATCAGCGCCTCCTTGCAAGGGC CGGAGATGTATGAAATCTACACGAGCTCCAAAGAGGACAGGAACGCCTGGATGGCCCACATCCAAAGGGCTGTGG CGAGACTCCGGGACTTCAAGAGCGGTTGAGCATGAAAGACCAGCTGATCGCACAGAGCCTCCTAGAGAAACAGC AGATCTACCTGGAGATGGCCGAGATGGCCGCCCCGAGAGACCTGCCCCAGCCCCGAGGCCTATTCCGTGGAGGGG ACCCATCCGAGACCCTGCAGGGGGAGCTAATTCTCAAGTCGGCCATGAGCGAGATCGAGGGCATCCAGAGCCTGA AGACCTTCGCGGGCTACGACTGCACAAACAGCCCCACCAAGAATGGCAGTTTCAAGAAGAAAGTCAGCACTG ACCCCAGGCCCCGAGACTGGCGAGGCCCCCAAACAGCCCGGACTTGAAGCTCAGTGACAGTGACATTCCTGGGA GCTCTGAGGAATCGCCGCAGGTGGTGGAGGCGCCAGGCACGGAATCCGATCCCCGTCTGCCCACCGTCCTGGAGT CGGAGCTTGTCCAGCGGATCCAGACACTGTCCCAGCTGCTCCTGAACCTTCAGGCGGTAATCGCCCACCAGGACA GCTATGTGGAGACGCAGCGGGCTGCCATCCAGGAGCGGGAGAAGCAGTTCCGGCTGCAGTCGACGCGTGGGAACC TGCTGCTGGAGCAGCAGCGCAACGCAACTTCGAGAAGCAGCGGGAGGAGCGCGCGGCCCTGGAGAAGCTGCAGA GCCAGCTGCGGCACGAGCAGCAGCGCTGGGAGCGCGAGCGCCAGTGGCAGCACCAGGAGCTGGAGCGTGCGGGCG CGCGGCTGCAGGAGCGCGAGGGCGAGGCGCAGCTACGCGAGCGGCTGGAGCAGGAGCGGGCCGAGCTGGAGC GCCAGCGCCAGGCCTACCAGCACGACCTGGAGCGGCTGCGCGAGGCCCAGCGTGCCGTGGAGCGGAGCGGGAGC CCCAGCCCCAAGCCACCTCCCAGCTTCAACGGGGAAGGGCTGGAGGGCCCTCGGGTGAGCATGCTGCCATCCG GCGTGGGGCCAGAGTACGCAGAGCGCCCCGAGGTGGCTCGCCGGGACAGCGCCCCCACCGAGAGCCGGCTGGCCA CCACCAAGCTGGCGGCCTCCACCAAGGGTGGCAAGGACAAGGGCGGCAAGAGCAGGGGCTCTCAGCGCTGGGAGA GCTCAGCGTCCTTCGACCTGAAGCAGCAGCTGCTCCAACAAGCTCATGGGGAAAGATGAGAGCACCTCACGGA ACCGCCGCTCGCTGAGCCCTATCCTGCCCGGCAGACACAGTCCTGCGCCCCCACCAGACCCTGGCTTCCCCGCCC TCTAAAAGGGCCGTGACTCAAGGAAAGTTTTTAATGGAAAGTTGAGCCAGAACTAAACCAGGGAGCTGTCTGAAA TCATAGCACCCCATCCGGGTGGCGGGAGATCAACTCCGAGCTGTTTTTCCGAGGCAGTGAGGAACGGTGCCGGC TCTGCACGGAGCTGAGGACAGGACAGACCTTGCTTTGAGAAGGAGCTGCCGGGCCGGGGCCACGCTCCACAGCCGC CGCGCGACAGTGGAGCCAAGGGTTAGGGCACCAGGAGGGGCCAGGTGGCGTCGGCAGCATCTGTCCCCAGAATCA GGCAGAATCCACTTCCCAAACAGAGCCCCACGCAGGTTCACCATGAACCTCAGGGTCAGGGAATGAGCCAGGCAC GGGGCATGGGCAGAGAGGGCCACGGGGCAGGGCCCACTGAGGGAACATCAGTGGCCCTCCAGTCAGGTTCTGTG

1120/2682 FIGURE 1016B

GGTTTGGAAGCCCATCGTGAAAGGGGCTGACCTTTGCCCCCTTTTTACTTGGCATTGGTTTTGAAACCAGCTGTTT $\verb|CCCAAACTCTGCTTCCCAAGGGCAACCGTTGCTGTTCACACGCTCAGCCTGTCTGGGGGAGCGGGCCTCTAGCTT|\\$ CAGCCAGGGCGGGTACACCCCTGGGCACAGGGTCCTCAGCCCCCGGGAAATGAGCTCCCAGGGCTGGCGTCCCA CCTTCCAGGTGGGGGCTGGCACATCACAGACTGTCGAGAGCGCCATGTCCCAGGGCATGCAGAGGTTGCACCTAG ${\tt AGACGTTGCAGCAAGTGGACAAGTGGCCGCTGTGCGGGCCCCTCGCTTGTAGTGAGCTGTTGCAGCTTACGGTCC}$ ${\tt GTTCCCTGGAGGGGTGGAGGAGGAGGTGTTGGGCAGCATCAAAGGTGCTGGGACATCCCAGGGTGGTGAGATCC}$ ATCCACGATCCAGCTCCGGTGGAGAAAGGGCCCATGTCAAGCCTTGTTCTGCACCCCAAGCATTGGTGGTAGGAC TGGGTCCTGGCTGATCGTCCTTGTTCCCAGTGGGGTACATGTGAGCCCCTGCCAGGGCCAAGTCCTTCTCCCGAA CCCAGGGTCCTGGGAACTGCAGATCCCGGGGGGATTCAGCCCTTCTCCCACTGTGCTGGCAGAGGCACTCCTGTG CCGGGAACCAGAGCCCACAGCCATACAGCCCATTGGTGACAAGGTCCTGAGAACACAGTGGCCAGGTGTCCCCA GGCTCCTGGCCCTCCGACGACCTCAACTCTGCCCAGCCCGGTCCCTGGCCATCAGCGACGCTGTCCGCCCCCCG TCAGATCCCATGTGTGCCATGTTTATCATCAGTGTTTTGTATTTTTGTACTGAGTATCGGAGCACTTTACAGAAG CTGACTGTACATTCCTGTTCTGTTGTGAAGAGAACATTCCCAGACCCTGGCACCCTCCTGAGCCGGCGTGTGCCG GTCCAGCCCTCCGAGATGCCACAATTCCTTGGATGGGGGAGAAGTTCAAGGAATTTCTGCTCGGCCACGCGGTGG GAACCCCGCGTCCCCGCCATGTGGCAGAGGGGTCTCAGTCGTGCTAGGCATCGGGCGGCAGCGCCGACAGCCCTT $\tt CCCTCGCCAGTGCCCCTCGGCCACTCCTGGGTTGGAGCCCGATTTTATTTGTAAAGTTGACAGTCGAGCAAATGT$ ${\tt TCCTATTTCGTGGGATCTGCACACGTCTTTGTCAGTTGTGGTCATGATCTTAGTCACCTGCTAATTATTTTTAC}$ AATGATTACAACATTTCCTCACTGCGGGATATTTCTGACCCGCTTTAGAACTTAAGACCTGATTCTAGCAATAAA CGTGTCCGAGATG

1121/2682 FIGURE 1017

MTVSQKGGPQPTPSPAGPGTQLGPITGEMDEADSAFLKFKQTADDSLSLTSPNTESIFVEDPYTASLRSEIESDG HEFEAESWSLAVDAAYAKKQKREVVKRQDVLYELMQTEVHHVRTLKIMLKVYSRALQEELQFSSKAIGRLFPCAD DLLETHSHFLARLKERRQESLEEGSDRNYVIQKIGDLLVQQFSGENGERMKEKYGVFCSGHNEAVSHYKLLLQQN KKFQNLIKKIGNFSIVRRLGVQECILLVTQRITKYPVLVERIIQNTEAGTEDYEDLTQALNLIKDIISQVDAKVS ECEKGQRLREIAGKMDLKSSSKLKNGLTFRKEDMLQRQLHLEGMLCWKTTSGRLKDILAILLTDVLLLLQEKDQK YVFASVDSKPPVISLQKLIVREVANEEKAMFLISASLQGPEMYEIYTSSKEDRNAWMAHIQRAVESCPDEEEGFF SLPEEERKVVEARATRLRDFQERLSMKDQLIAQSLLEKQQIYLEMAEMGGLEDLPQPRGLFRGGDPSETLQGELI LKSAMSEIEGIQSLICRRLGSANGQAEDGGSSTGPPRRAETFAGYDCTNSPTKNGSFKKKVSSTDPRPRDWRGPP NSPDLKLSDSDIPGSSEESPQVVEAPGTESDPRLPTVLESELVQRIQTLSQLLLNLQAVIAHQDSYVETQRAAIQ EREKQFRLQSTRGNLLLEQERQRNFEKQREERAALEKLQSQLRHEQQRWERERQWQHQELERAGARLQEREGEAR QLRERLEQERAELERQRQAYQHDLERLREAQRAVERERERLELLRRLKKQNTAPGALPPDTLAEAQPPSHPPSFN GEGLEGPRVSMLPSGVGPEYAERPEVARRDSAPTESRLAKSDVPIQLLSATNQFQRQAAVQQQIPTKLAASTKGG KDKGGKSRGSQRWESSASFDLKQQLLLNKLMGKDESTSRNRRSLSPILPGRHSPAPPPDPGFPAPSPPPADSPSE GFSLKAGGTALLPGPPAPSPLPATPLSAKEDASKEDVIFF

FIGURE 1018

 ${\tt CACATGTCGGCGCAGGCGGCCAAAGTCAGTAAAAAGGAGCTCAACTCCAACCACGACGGGGCCGACGAGACCTCA}$ AGTGAGGAGATTTTGAAAGTAGAACAGAAATATAACAAACTCCGCCAACCATTTTTTCAGAAGAGGTCAGAATTG ATCGCCAAAATCCCAAATTTTTGGGTAACAACATTTGTCAACCATCCACAAGTGTCTGCACTGCTTGGGGAGGAA GATGAAGAGGCACTGCATTATTTGACCAGAGTTGAAGTGACAGAATTTGAAGATATTAAATCAGGTTACAGAATA GATTTTTATTTTGATGAAAATCCTTACTTTGAAAATAAAGTTCTCTCCAAAGAATTTCATCTGAATGAGAGTGGT GATCCATCTTCGAAGTCCACCGAAATCAAATGGAAATCTGGAAAGGATTTGACGAAACGTTCGAGTCAAACGCAG AATAAAGCCAGCAGGAAGAGGCAGCATGAGGAACCAGAGAGCTTCTTTACCTGGTTTACTGACCATTCTGATGCA GGTGCTGATGAGTTAGGAGAGGTCATCAAAGATGATATTTGGCCAAACCCATTACAGTACTACTTGGTTCCCGAT GAAGATGAC<u>TAA</u>ATAGAACACTGATGGATTCCAACCTTCCTTTTTTTAAATTTTCTCCAGTCCCTGGGAGCAAGT TGCAGTCTTTTTTTTTTTTTTTTTTTTTCCCTCTTGTGCTCAGTCGCCCTGTTCTTGAGGTCTCTTTTCTCTA CTCCATGGTTCTCAATTTATTTGGGGGGAAATACCTTGAGCAGAATACAATGGGAAAAGAGTCTCTACCCCTTTC TGTTCGAAGTTCATTTTTATCCCTTCCTGTCTGAACAAAACTGTATGGAATCAACACCACCGAGCTCTGTGGGA AAAAAGAAAACCTGCTCCCTTTGCTCTGGAAGCTGGAGGGTGCTAGGCCCCTGTGTAGTAGTATAGAAT TCTAGCTTTTTCCTCCTTTCTCTGTATATTGGGCTCAGAGAGTACACTGTGTCTCTATGTGAATATGGACAGTT ATGATGACTTGAGCCCTGCCACTCAATGGGAGAATCAGCAGAACCTGTAGGATCTTATTTGGAATTGACATTCTC TATTGTAATTTTGTTCCTGTTTATTTTTGGGTTTCTTTTTGTTTCACTGGAAAGGAAAGATGATGCTCAGTTTTA **AACGTTAAAAGTGTACAAGTTGCTTTGTTACAATAAAACTAAATGTGTACACAAAGGATTTGATGCTTTTCTCTC** AGCATAGGTATGCTTACTATGACCTTCCAAGTTTGACTTGTATAACATCACTGTCAAACTTTGTCACCCTAACTT $\tt CGTATTTTTGATACGCACTTTTGCAGGATGACCTCAGGGCTATGTGGATTGAGTAATGGGATTTGAATCAATGT$ ATTAATATCTCCATAGCTGGGAAACGTGGGTTCAATTTGCCATTGGTTTCTGAAAAGTATTCACATCATTTGGGA TACCAGATAGCTCAATACTCTCTGAGTACATTGTGCCCTTGATTTTTATCTCCAAGTGGCAGTTTTTAAAATTGG CCTTTTACCTGGATATAAATTAATTGTGCCTGCCACCACCATCCAACAGACCTGGTGCTCTAATGCCAAGTTATA CACGGGACAGTTGCTGGCATGTCTTCATTGGCTCTCAAAATGTGGCCAAGAAGATAGGCTCTCAGTAAGAAGTC ATGGACTCAGCTCTGTCTGCTCAATGCCATTGTGCAGAGAAGCACCCTAATGCATAAGCTTTTTAATGCTGTAAA ATATAGTCGCTGAAATTAAATGCCACTTTTTCAGAGGTGAATTAATGGACAGTCTGGTGAACTTCAAAAGCTTTT TGATGTATAAAACTTGATAAATGGAACTATTCCATCAATAGGCAAAAGTGTAACAACCTATCTAGATGGATAGTA TGTAATTTCTGCACAGGTCTCTGTTTAGTAAATACATCACTGTATACCGATCAGGAATCTTGCTCCAATAAAGGA ACATAAAGATTTAAAAAAAAAAAAAAAAA

1123/2682 FIGURE 1019

MSAQAAKVSKKELNSNHDGADETSEKEQQEAIEHIDEVQNEIDRLNEQASEEILKVEQKYNKLRQPFFQKRSELI AKIPNFWVTTFVNHPQVSALLGEEDEEALHYLTRVEVTEFEDIKSGYRIDFYFDENPYFENKVLSKEFHLNESGD PSSKSTEIKWKSGKDLTKRSSQTQNKASRKRQHEEPESFFTWFTDHSDAGADELGEVIKDDIWPNPLQYYLVPDM DDEEGEGEEDDDDDEEEEGLEDIDEEGDEDEGEEDEDDDEGEEGEEDEDD

FIGURE 1020A

CGGGAGCCCAGGCGGGCAGGCCGCTGGGGTCGGGGCTGCACGTACGAGAGCCGGGACGCCCGGGTTCAGAGCGAA GGAGGAGGCATGGCTTCGGTGTTCATGTGTGGCGTGGAGGACCTGCTGTTCAGCGGCAGCCGCTTCGTATGGAAC TTGACCGTGTCCACGCTGCGGAGATGGTACACGGAGAGGCTGCGGGCTTGCCACCAGGTGCTGCGGACGTGGTGC GGGCTGCAGGACGTGTACCAGATGACAGAAGGCAGGCACTGCCAGGTGCACCTCCTGGATGATAGGAGACTGGAG GAGTATTTTGGAATAACATTCATAGATGACACAGGTCAGCAGAACTGGCTGCAGTTAGATCACCGAGTTCTTGAC CACGATTTGCCCAAGAAACCAGGCCCAACCATTTTGCACTTTGCTGTGAGGTTTTACATTGAGAGCATATCGTTT TTAAAGGATAAAACCACCGTGGAGCTGTTTTTCCTGAATGCAAAGGCCTGTGTGCACAAGGGGCAAATCGAAGTA GAGAGCGAAACCATCTTCAAGTTAGCAGCGTTTATTTTACAGGAAGCCAAGGGAGATTATACCAGTGATGAAAAT GAGGACAGGGTAATTGAGCATTATTTGAAAATCAAAGGTCTCACTCGAGGTCAAGCTGTGGTTCAGTATATGAAA ATAGTAGAAGCTCTACCGACTTACGGTGTCCATTATTATGCAGTAAAGGATAAGCAAGGACTTCCTTGGTGGCTT GGAATAAGCTATAAGGGAATTGGCCAATATGATATACAAGACAAGGTGAAGCCTCGGAAGTTATTCCAATGGAAA CAGCTGGAGAACTTATATTTCCGTGAGAAAAAATTTGCTGTTGAAGTTCATGATCCACGAAGGATTTCAGTTTCA AGAAGAACCTTTGGGCAAAGTGGCCTGTTTGTGCAAACATGGTATGCTAACTCTTCTCTCATCAAGTCCATTTGG GTAATGGCAATTAGTCAGCATCAGTTTTACTTGGACCGGAAGCAAAGCAAAGCAAAAATTCCTTCAGCCAGGAGT TTAGATGAGATTGCAATGGATTTGACAGAGACAGGAACACAAAGGGCCTCCAAGCTGGTGACACTGGAGGCGAAA AGTCAGTTCATCATGGCAAGTAATGGCAGTTTAATCTCCTCAGGTTCTCAAGACTCAGAAGTTAGTGAAGAGCAA **AAGAGAGAAAAAATCCTTGAACTAAAGAAGAAGGAGAAACTATTACAAGAAAAACTTCTGAAAAAAAGTTGAGGAG** CTTAAGAAGATCTGTCTGCGGGAGGCTGAGCTCACAGGCAAAATGCCCAAAGGAGTATCCCCTGAACATAGGCGAG AAGCCTCCTCAGGTCAGAAGACGTGTGGGTACTGCGTTCAAATTAGATGACAACTTGCTGCCGAGTGAAGAAGAT CCTGCTTTGCAAGAACTGGAGAGTAATTTTCTAATACAACAAAAGCTGGTGGAAGCTGCAAAGAAACTTGCCAAT GAGCCAGACCTTTGTAAAACTGTGAAGAAAAAGCGAAAGCAAGATTACACAGATGCGATGAAAAAAGCTTCAGGAG GACATAATCCCCTCAGAGAGTAGCTCTTTGTCTGACACCACCACCTATGATGATCCCAGTGATGCCTTCACTTTT CCTGGGCAGCGATCAAGTTCAGTACCTCATTCTCCAAGAATTCTTCCCCCCAAGTCTCTTGGTATTGAGCGAATC AGCCCTTACAAAACTCTGGAGAGGCGGCCCCAGGGAGGACGAAGCATGCCCACCACGCCAGTTCTTACCCGAAAC GCCTACAGCAGCAGCCACTTGGAACCCGAATCTTCATCTCAGCACTGCCGCCAGCGGAGTGGAAGCCTGGAGTCC CAGTCCCATCTGCTCTCCGAGATGGACAGCGATAAGCCATTTTTCTCCCTCTCCAAATCCCAAAGAAGCAGCAGC ACAGAAATCCTCGATGACGGGTCTTCTTATACAAGCCAATCAAGCACAGAGTATTACTGTGTGACACCAGTTACC GGCCCCTATTACACCACCCAGACCCTGGACACTCGCACCAGGGGTCGGAGGGGTCAAAGAAACAGAATGTTTCT ACTTCAAATTCAGGAAGCATGCCCAACCTAGCACAAAAGGATAGTTTGAGGAATGGTGTTTACTCAAAGAGTCAG GAGCCACCGTCTTCCAGTTACTACATTGCCGGGTACACCCCTATGCAGAGTGTGACTTTTATTACAGTGGTGGT TATGTCTATGAGAATGACACCGAGGGACAGTATAGTGTCAACCCTTCCTACCGGTCCTCAGCCCACTATGGATAT GAGCGCCAGAGGGACTACAGCAGATCCTTTCACGAAGATGAGGTCGACCGGGTACCCCATAACCCATATGCAACT CTCCGGCTGCCAAGGAAGGCTGCTGCAAAATCGGAGCACATCACCAAAAACATCCACAAGGCCTTAGTTGCCGAG CACTTGCGTGGCTGGTACCAGCGGGCCTCTGGGCAGAAGGATCAGGGACACAGCCCGCAGACCAGCTTTGACTCA GACAGGGGATCACAGAGATGCCTGGGGTTTGCGGGGCTGCAAGTACCTTGTTCTCCAAGCAGTCGTGCATCCTTG TACTCTTCAGTGTCTTCTACAAATGCTTCTGGGAACTGGAGGACCCAGTTAACCATAGGGCTGTCGGATTACGAG ACTCCAGCACATTCTTCTTACACCAGCTGCTATGGCAATGTCTATAATCCTTTACCCTCTCCAAGCAGACAATAC ACAGAAATCAGTCAACTGGATGGTACAGATGGAAACCAGCTGGAAGACAACCTGGAGAGTAGTGAGCAGAGACTC TTTTGGCATGAAGATTCAAAGCCTGGAACATTAGTCTGAACTGCAGTTGGACCTCCTGACCAAGCACTGCGTTCT CACACTAGTGTGCCTTGCAAATTGTATTTGTCTTCCGAGAGGATGTTCGTTTTAGAAACCTAAAGACATCAAAGG TTGAAGAGAGACTTAGTTGCCCTGGAAGTGAATCAGTGAATCACACCCAAGCCCCACAAAGCCCCTAAAGGAG GATTTGGCCTTTCAAACTCTAGGCACTAACGTAACTGTAGGGTCTGCCCACATGTTGAAGTATTGCCAAGAGAG ACTCAGTGTGAAGCCTTCATCAATAGCAAGCACTTTTTAAGGGAGTAAAAGTTGTTAAAGGCAAACGTCAAAAAC ATGAAAGGGCATTCAGGATGTCCCATGGCAATAAGAACAGGGGAAATCTCAGAGCACAATTCAGCAGGATGAGAG

1125/2682 FIGURE 1020B

AAGGGGAACCAGAAGCTCCGGAGTCATTGCTCACTTCAGAGTTTGAATTCGTGAGCTGACAAAGAGTAACATGCT CTTTCTACACAGACATGGACAATTTAGACAGTATTGGAAAATTACTTGAAGCTGGATTTTCATGAAGTTCTGAAT GAGTGTAAATGTTTTTTAGGATACTATAAAGAGTGATGTTTTTCATAAGCACCATAAAATGGGTTCTGGAAAAAC TGATTACCTTAGCATCCTGTAATATAACTTATGGTAGCAGATTGGGGAAAATGAAGCAGCCCACTGAATAATTGA CAAAGTCTGCTTGGAGAACATTCTAAGGTACAATATCATGGAGCTCCTTTTTCCTTTCTCCACTAATTGCGTGAT GAGCTATTGTTCTGGCTGGTAATTCTCCAACTCGGCTGTCATTTGAAGTGGCAGACTTAATATGGAAAGTTTTTA TTTTAGATGAATTGCGTGCCTTAAAATGGTGAACGTTAGAAAATTAAACAAGTCTGGATTCCACAAGTAGTTCCA AGTCACCAAGTGACAAAAACAAGGTTAACATTAAAAAAGAAAAACAACAACAACGACAAAAAAGCTCCAAGCTGCA GTGGATTTAATTATGAGGCTAAAACTACCTCATACTTTCCTTGGAAGAACTAATTAGCTATGGTTTATTGTAGGG TTACATAAAAGGTGCTCCTTTCCCCCTTCTTTTATACAAGTTTCTTGTTCATATTGTGAATAGAAAAGTTTCTGA ACAACTTTTTTGGAACATTTTCTATCTATATTCCAAAGCATGTAATATATACATAAAAACGATTTGTTAAACTGG CTTATTCCTTTTTTGCATATTTGTATAGCCTTCTAGAATCAGAAATAACCTTTTTTGCATATTCTTTATTGTTCT GACTTTTCAAGACCTATTATTTTTTTACATAGGTCAATAAACAAAAGGTGTGCTACTG

1126/2682 FIGURE 1021

REPRRAGRWGRGCTYESRDARVQSEGGMASVFMCGVEDLLFSGSRFVWNLTVSTLRRWYTERLRACHQVLRTWC
GLQDVYQMTEGRHCQVHLLDDRRLELLVQPKLLARELLDLVASHFNLKEKEYFGITFIDDTGQQNWLQLDHRVLD
HDLPKKPGPTILHFAVRFYIESISFLKDKTTVELFFLNAKACVHKGQIEVESETIFKLAAFILQEAKGDYTSDEN
ARKDLKTLPAFPTKTLQEHPSLAYCEDRVIEHYLKIKGLTRGQAVVQYMKIVEALPTYGVHYYAVKDKQGLPWWL
GISYKGIGQYDIQDKVKPRKLFQWKQLENLYFREKKFAVEVHDPRRISVSRRTFGQSGLFVQTWYANSSLIKSIW
VMAISQHQFYLDRKQSKAKIPSARSLDEIAMDLTETGTQRASKLVTLEAKSQFIMASNGSLISSGSQDSEVSEEQ
KREKILELKKKEKLLQEKLLKKVEELKKICLREAELTGKMPKEYPLNIGEKPPQVRRRVGTAFKLDDNLLPSEED
PALQELESNFLIQQKLVEAAKKLANEPDLCKTVKKKRKQDYTDAMKKLQEIENAINEYRIRCGKKPSQKATVLPE
DIIPSESSSLSDTTTYDDPSDAFTFPGQRSSSVPHSPRILPPKSLGIERIHFRKSSINEQFVDTRQSREMLSTHS
SPYKTLERRPQGGRSMPTTPVLTRNAYSSSHLEPESSSQHCRQRSGSLESQSHLLSEMDSDKPFFSLSKSQRSSS
TEILDDGSSYTSQSSTEYYCVTPVTGPYYTTQTLDTRTRGRRRSKKQNVSTSNSGSMPNLAQKDSLRNGVYSKSQ
EPPSSSYYIAGYTPYAECDFYYSGGYVYENDTEGQYSVNPSYRSSAHYGYERQRDYSRSFHEDEVDRVPHNPYAT
LRLPRKAAAKSEHITKNIHKALVAEHLRGWYQRASGQKDQGHSPQTSFDSDRGSQRCLGFAGLQVPCSPSSRASL
YSSVSSTNASGNWRTQLTIGLSDYETPAHSSYTSCYGNVYNPLPSPSRQYTEISQLDGTDGNQLEDNLESSEQRL
FWHEDSKPGTLV

FIGURE 1022

GGGACGTGAGCCGCTGCGCCCACCGGGCTAGACCCGGCGCCATCATGCTGCTTCTGCCAAGCGCCGCGGACGGCC GGGGCACCGCCATCACCCACGCTCTGACCTCTGCCTCTACACTCTGTCAAGTTGAACCTGTGGGAAGATGGTTTG AGGAATCAGAAGATGAAGAATTGCAGTTGGAAGAGTTTCCCATGCTGAAAACACTTGATCCCAAAGACTGGAAGA ACCAAGATCATTATGCAGTTCTTGGACTTGGCCATGTGAGATACAAGGCTACACAGAGACAGATCAAAGCAGCTC ATAAAGCAATGGTTTTAAAACATCACCCAGACAAACGGAAAGCAGCTGGTGAACCAATAAAAGAAGGAGATAATG ACTACTTCACTTGCATAACTAAAGCTTATGAAATGTTATCTGATCCAGTGAAAAGACGAGCATTTAACAGTGTAG ATCCTACTTTTGATAACTCAGTTCCTTCTAAAAGTGAAGCAAAGGATAATTTCTTCGAAGTGTTTACCCCAGTGT TTGAAAGGAATTCCAGATGGTCAAATAAAAAAATGTTCCTAAACTTGGTGATATGAATTCATCATTTGAAGATG TAGATATATTTTATTCTTTCTGGTATAATTTTGATTCTTGGAGAGAATTTTCTTATTTAGATGAAGAAAAAAG AAGAATGAACAGAATAAGAACATTAGTTGACAATGCATACAGCTGTGATCCAAGGATAAAAAAGTTCAAGGAAG TGCTGGCAAAGAAGAAAAGATATCCAGAAAAAAGCCATTAAGAAGGAAAGGCAAAAACTTCGAAACTCATGCA AGATAGAAGAATAAATGAGCAAATCAGAAAAGAGAAAGGGAAGCTGAGGCTCGTATGCGACAAGCATCTAAGA ACACAGAGAAATCAACTGGTGGAGGTGGAAATGGAAGTAAAAATTGGTCAGAAGATGATCTACAATTACTAATTA CCTCTGGAGTCAAAAGAACTGCCAAAGATGTTATTGGCAAAGCAAAGAGTCTCCAAAAACTTGACCCTCATCAAA AAGATGACATAAATAAAAAGGCATTTGATAAGTTCAAAAAAGAACATGGAGTGGTACCTCAAGCAGACAACGCAA CGCCTTCAGAACGATTTGAAGGTCCATATACAGACTTCACCCCTTGGACAACAGAAGAACAGAAGCTTTTGGAAC AAGCTTTGAAAACATACCCAGTAAATACACCTGAAAGATGGGAAAAAATAGCAGAAGCGGTGCCTGGCAGGACAA $\tt TGAATGCAAGTAGAGCCAAGAAA\underline{TGA}CAATCTTTGTTGTTGTGTGCATTTTTATAATAAAACTGAAAATACTGTAA$

1128/2682 FIGURE 1023

DVSRCAHRARPGAIMLLLPSAADGRGTAITHALTSASTLCQVEPVGRWFEAFVKRRNRNASASFQELEDKKELSE ESEDEELQLEEFPMLKTLDPKDWKNQDHYAVLGLGHVRYKATQRQIKAAHKAMVLKHHPDKRKAAGEPIKEGDND YFTCITKAYEMLSDPVKRRAFNSVDPTFDNSVPSKSEAKDNFFEVFTPVFERNSRWSNKKNVPKLGDMNSSFEDV DIFYSFWYNFDSWREFSYLDEEEKEKAECRDERRWIEKQNGATRAQRKKEEMNRIRTLVDNAYSCDPRIKKFKEE EKAKKEAEKKAKAEAKRKEQEAKEKQRQAELEAARLAKEKEEEEVRQQALLAKKEKDIQKKAIKKERQKLRNSCK IEEINEQIRKEKEEAEARMRQASKNTEKSTGGGGNGSKNWSEDDLQLLIKAVNLFPARTNSRWEVIANYMNIHSS SGVKRTAKDVIGKAKSLQKLDPHQKDDINKKAFDKFKKEHGVVPQADNATPSERFEGPYTDFTPWTTEEQKLLEQ ALKTYPVNTPERWEKIAEAVPGRTKKDCMKRYKELVEMVKAKKAAQEQVLNASRAKK

FIGURE 1024A

GATCCGCTCGCGCGCCGAAGGTTATGAGAAGACAGATGATGTTTCAGAGAAGACCTCACTGGCTGACCAGGAGGA AGTAAGGACTATTTTCATCAACCAGCCCCAGCTGACAAAATTCTGCAATAACCATGTCAGCACTGCAAAATACAA CATAATCACATTCCTTCCAAGATTTCTCTACTCTCAGTTCAGAAGAGCTGCTAATTCATTTTTTCTCTTTATTGC GCAAGTTTTGAGAAATGGTGCTTGGGAAATTGTCCACTGGGAAAAGGTGGCAGTAGGGGAGATAGTGAAAGTGAC CAATGGGGAACATCTCCCAGCAGATCTCATCAGTCTGTCCTCAAGTGAGCCCCAAGCCATGTGCTACATTGAAAC ATCCAACTTAGATGGTGAAACAAACTTGAAAATTAGACAGGGCTTACCAGCAACATCAGATATCAAAGACGTTGA CAGTTTGATGAGGATTTCTGGCAGAATTGAGTGTGAAAGTCCAAACAGACATCTCTACGATTTTGTTGGAAACAT AAGGCTTGATGGACATGGCACCGTTCCACTGGGAGCAGATCAGATTCTTCTTCGAGGAGCTCAGTTGAGAAATAC ACAGTGGGTTCATGGAATAGTTGTCTACACTGGACATGACACCAAGCTGATGCAGAATTCAACAAGTCCACCACT TAAGCTCTCAAATGTGGAACGGATTACAAATGTACAAATTTTGATTTTATTTTGTATCTTAATTGCCATGTCTCT TGTCTGTTCTGTGGGCTCAGCCATTTGGAATCGAAGGCATTCTGGAAAAGACTGGTATCTCAATCTAAACTATGG TGGCGCTAGTAATTTTGGACTGAATTTCTTGACCTTCATCATCCTTTTCAACAATCTCATTCCTATCAGCTTATT GGTTACATTAGAAGTTGTGAAATTTACCCAGGCATACTTCATAAATTGGGATCTTGACATGCACTATGAACCCAC AGACACTGCTGCTATGGCTCGAACATCTAATCTGAATGAGGAACTTGGCCAGGTTAAATACATATTTTCTGACAA AACTGGTACTCTGACATGCAATGTAATGCAGTTTAAGAAGTGCACCATAGCGGGAGTTGCTTATGGCCATGTCCC TGAACCTGAGGATTATGGCTGCTCCTGATGAATGGCAGAACTCACAGTTTGGAGATGAAAAAACATTTAGTGA TTCATCATTGCTGGAAAATCTCCAAAATAATCATCCAACTGCACCTATAATATATGAATTTCTTACAATGATGGC ATTGGTCAGAGCAGCCAAGCAATTGAATTTTGTTTTCACTGGAAGAACACCCGACTCGGTGATTATAGATTCACT GGGGCAGGAAGAAGATATGAATTGCTCAATGTCTTGGAGTTTACCAGTGCTAGGAAAAGAATGTCAGTGATTGT TCGCACTCCATCTGGAAAGTTACGACTCTACTGCAAAGGAGCTGACACTGTAATTTATGATCGACTGGCAGAGAC GTCAAAATACAAAGAAATTACCCTAAAACATTTAGAGCAGTTTGCTACAGAAGGGTTAAGAACTTTATGTTTTGC TGTGGCTGAGATTTCAGAGAGCGACTTTCAGGAGTGGCGAGCAGTCTATCAGCGAGCATCTACATCTGTGCAGAA CAGGCTACTCAAACTCGAAGAGAGTTATGAGTTGATTGAAAAGAATCTTCAGCTACTTGGAGCAACAGCCATTGA GGATAAATTACAAGATCAAGTGCCTGAAACCATAGAAACGCTAATGAAAGCAGACATCAAAAATCTGGATCCTTAC AGGGGACAAGCAAGAAACTGCCATTAACATCGGACACTCCTGCAAACTGTTGAAGAAGAACATGGGAATGATTGT TATAAATGAAGGCTCTCTTGATGGAACAAGGGAAACTCTCAGTCGTCACTGTACTACCCTTGGTGATGCTCTCCG GAAAGAGAATGATTTTGCTCTTATAATTGATGGGAAAACCCTCAAATATGCCTTAACCTTTGGAGTACGACAGTA TTTCCTGGACTTAGCTTTGTCATGCAAAGCTGTCATTTGCTGTCGGGTTTCTCCTCTTCAAAAATCTGAAGTTGT TGAGATGGTTAAGAAACAAGTCAAAGTCGTAACGCTTGCAATCGGTGATGGAGCAAATGATGTCAGCATGATACA TCAGTTCAAATATTTGAAGAATTTACTGATGATTCATGGTGCCTGGAACTATAACAGAGTCTCCAAGTGCATCTT ATACTGCTTCTACAAGAATATAGTGCTCTATATTATCGAGATCTGGTTTGCCTTTGTTAATGGCTTTTCTGGACA GATCCTCTTTGAAAGATGGTGTATAGGTCTCTATAACGTGATGTTTACAGCAATGCCTCCTTTAACTCTTGGAAT ATTTGAGAGATCATGCAGAAAAGAGAACATGTTGAAGTACCCTGAATTATACAAAACATCTCAGAATGCCCTGGA CTTCAACACCAAGGTTTTCTGGGTTCATTGTTTAAATGGCCTCTTCCACTCAGTTATTCTGTTTTGGTTTCCACT AAAAGCCCTTCAGTATGGTACTGCATTTGGAAATGGGAAAACCTCGGATTATCTGCTACTGGGAAACTTTGTGTA CACTTTTGTGGTGATAACTGTGTGTTTGAAAGCTGGATTGGAGACATCATATTGGACATGGTTCAGCCACATAGC GATATGGGGGAGCATCGCACTCTGGGTGGTGTTTTTGGGAATCTACTCATCTCTGTGGCCTGCCATTCCGATGGC CCCTGATATGTCAGGAGAGGCAGCCATGTTGTTCAGTTCTGGAGTCTTTTGGATGGGCTTGTTATTCATCCCTGT GGCATCTCTGCTCCTTGATGTGGTGTACAAGGTTATCAAGAGGACTGCTTTTAAAACATTGGTCGATGAAGTTCA GGAGCTGGAGGCAAAATCTCAAGACCCAGGAGCAGTTGTACTTGGAAAAAGCCTGACCGAGAGGGGCGCAACTGCT CAAGAACGTCTTTAAGAAGAACCACGTGAACTTGTACCGCTCTGAATCCTTGCAACAAAATCTGCTCCATGGGTA TGCGTTCTCTCAAGATGAAAATGGAATCGTTTCACAGTCTGAAGTGATAAGAGCATATGATACCACGAAACAGAG

1130/2682 FIGURE 1024B

CCGCAGTCTGCTAACCAATTCCAGTCTGGTCCATGAAGAGGAAAGGTAGATCTGAGCTCATCTCGCTGATGGACA TTCAGATTCATGTATATTATAGACATAAGCACTGTGCAACTGTACTGTAACACCATCTCTTTTGGATTTTTTTAA GGTATTTGCTAAGTCTTTGTAAACGGAAATTGAAAATGACCTGGTATCTTGCCAGAGGGCTTTCTTAAACGGAGA CAACCATTAAAAAACTCTAAATGATATTTAGTTAAAGGGACTCTTGGTATCCAGACTTAGATTTCAGGATATGCT GAAACAAACCAGCATTCTTAAGGAACTGACTCACCTTCCTGAGCAAAATTTCTAAACAAGCATTTGTGTCCAAAA TTGTCTTGATAAATGTTTGCCAAAGAGGTTCAGTAAGTGTTTTTCTAGTTCAGTAGTCATATGCCCAGAAATGTA AGAGAAAGTTTACTTCCAGTTCCGCTGTAAGATCTGCATGCCTGACTTTCCAAATGTAAGAGTGATTTACAAAAA TGAATATTTCAAGGCATTTGCTACTAAAATCGGTGATGTTGCACCTTTGGCCTTACAAATGCTTCTTTGTTGTTT GTCGTGTTTATTTGTTAGAGGACACGTGTTAATGTGACTCTGTTGTTATGACACTGATTTTTCAAACTATGTA TGTTTCAGGTATTTCTGATGAAGTTTCATCATCATTTAGATTTTTCTAAAAATCTGGCTAATGCAGTAGATTGAG TGATGTCATTTTGTCTTAAAGTTTTTCCTCTTAAGAAACATATGCTACGTATTTACGTGGGATTTCCAAAGCTTC TGTTGCAATATTTGGAATAACATGTCAGATAAATGCATGGGCTTTTGTCCTGTGTTCCCAGTTCCCACTAGAGATG CCTGTGTCTTGTGTAGCACACCCAGTGTTATGGTGACTGCCCCCTATACTGAAGACTGAAAATTATTTCACAGTT CACTCATCAAATAGTTCCCAAAATTCGTCACATGCTGCTTATTGGGACAAATAGGTAGTACATTTTCCCCATTTA AAAAATGCGGATTTTACTCAGGCCGGTAACTTTACAGTCAGAGGACACGTTCATCATGAGTAGCTTTTGTTAGTA TGTTTTAAAATGTATCTTCAGTTCAATTATTTTCAGCATTTACAAGACATCTGAAAATGGCTATTTTGCTACCAA CAGTAAATGAAGGGGCTGTTTAAAAACCACAACCAGTTTTCTACACTATTTTTTAAATAATACTTTCATTTGAAA AAAAGGAATTAGTTTTCAGATACACTTCAGAGATTGAAGCAAACTATTTGCCTTTTACTCAAAAGCCTGCTTGCC TTTACATGGACTTACCAGCAAAATAGGTAGAACTTTCTCTTTTAAAAAAAGTCAACTAGAATTGAGAAGAGGTGA TTTTTTTCAGATCGCTTCTCGAGTTTAATATTTTCACATTCTTTTCACCCTTTTTCTCAATCTAGATTTAAAAT TAGGATATATGTCATTTCCTTGTCTGTATTTGTAGCTCCTTAGTTACCAGTATGCCTCTCCATTTTCTACAAATA AGAGGTTATAACACATATACATAATTCTAACCTTAAGGGAACACACGTTTACATACTTTACTTCCCAAGCCCTTC CTGTTTGGGGTACAGATTGAGAGAGTCATGAATCAACACATCTAGCAAGACCACAGGTGTAAGAGTCTAAGATCG AGTGGTGATAGCTGAGGTCAAACCACAAAAAATAAGAAAGCAAGAGTGAAATGCACCCCTCCAGAGAAACACTTT GTAGTGTTTAATTCTGTTAATAGAGAAGAGCTGCTTCTGTTTGCGCTCACTTCATCAGTGGCACCCTTCTGCAGA **ATTTTAATAAAAACATTATGGATATAATAGAACTGGATTTTCTGACTTAAAAATGTAAGTTTTATTTTAATCT** TGAAACGTGGATTGTTTCTGTGGAGCTCTTAAACATGAGAAGAATACTTACGGTTGATAATGTGTAACATGATCT GAAATGTGACTAATTTGAGCCTCTTTGTCCCATCGTCCTGTTTTTTGAATTATTGACATTGTCAGTCTCTTTGCTT CCTGGGTGAGACTTGGGGTTTGAGGGACAGGGAATGACCTTCTTGGTGAAACTTAAAATATAACATTGCAATTGC TCAATTAAAAAGTTCCTTATAGGGACTCTGGCAAATGCTAACACAGTTGCTTTACAATGTTTACAATTCAGACAA TACGACTTATAATAGAAAATCCTCATTCATTTAGCATTGAAAAGCTGGAAGTTGCTTCTTTAATGTTGAATAGTA AAAGATGTTATATTGTAGATATTATTAGGAAAACAGTGTTTCTCAGGAACGTTGTAAATTTTAAATGATATATGT ACTTCCCGTCCTCCACCTCCACTCTGTGCTCTAATGTGAGACTGCTTCAGCAGTGTTGCTAAGTTAATGGAAAA CTTTTCTAATCAAGTCAGGTGAATGTGTATTCTGCTAAATAATGTTAGCCATTTACATGAATTGTATGGTCATT **AAATTTTATACTTTAATTTTGCCGTTCAGCATTCTAAATATCCAATGTGAAAGTCACATGATAATTTGTTTTGCA** ATAGATTGTATTATTCATAGTTTTAAAATTATGACAATGTCATAATTACTACAAAGCTAAATAATCGTGTTTATT TTTGTGCAGTTGCCCTTTGATAGTTCCTGGTTTTAAAACCTATTAAGTGTATAATCTTACAAATAGTCATCTACA ATCATGCAGTTCAGTGCCTAATAAATGCTTTTTAATGATGAGCATTTCTATAATGACTCGTAAGATACCATAGTC

FIGURE 1024C

1132/2682 FIGURE 1025

MPTMRRTVSEIRSRAEGYEKTDDVSEKTSLADQEEVRTIFINQPQLTKFCNNHVSTAKYNIITFLPRFLYSQFRR AANSFFLFIALLQQIPDVSPTGRYTTLVPLLFILAVAAIKEIIEDIKRHKADNAVNKKQTQVLRNGAWEIVHWEK VAVGEIVKVTNGEHLPADLISLSSSEPQAMCYIETSNLDGETNLKIRQGLPATSDIKDVDSLMRISGRIECESPN $\verb"RHLYDFVGNIRLDGHGTVPLGADQILLRGAQLRNTQWVHGIVVYTGHDTKLMQNSTSPPLKLSNVERITNVQILI"$ LFCILIAMSLVCSVGSAIWNRRHSGKDWYLNLNYGGASNFGLNFLTFIILFNNLIPISLLVTLEVVKFTQAYFIN WDLDMHYEPTDTAAMARTSNLNEELGQVKYIFSDKTGTLTCNVMQFKKCTIAGVAYGHVPEPEDYGCSPDEWQNS ${\tt QFGDEKTFSDSSLLENLQNNHPTAPIIYEFLTMMAVCHTAVPEREGDKIIYQAASPDEGALVRAAKQLNFVFTGR}$ TPDSVIIDSLGQEERYELLNVLEFTSARKRMSVIVRTPSGKLRLYCKGADTVIYDRLAETSKYKEITLKHLEQFA TEGLRTLCFAVAEISESDFQEWRAVYQRASTSVQNRLLKLEESYELIEKNLQLLGATAIEDKLQDQVPETIETLM KADIKIWILTGDKQETAINIGHSCKLLKKNMGMIVINEGSLDGTRETLSRHCTTLGDALRKENDFALIIDGKTLK YALTFGVRQYFLDLALSCKAVICCRVSPLQKSEVVEMVKKQVKVVTLAIGDGANDVSMIQTAHVGVGISGNEGLQ AANSSDYSIAQFKYLKNLLMIHGAWNYNRVSKCILYCFYKNIVLYIIEIWFAFVNGFSGQILFERWCIGLYNVMF TAMPPLTLGIFERSCRKENMLKYPELYKTSQNALDFNTKVFWVHCLNGLFHSVILFWFPLKALQYGTAFGNGKTS DYLLLGNFVYTFVVITVCLKAGLETSYWTWFSHIAIWGSIALWVVFLGIYSSLWPAIPMAPDMSGEAAMLFSSGV FWMGLLFIPVASLLLDVVYKVIKRTAFKTLVDEVQELEAKSQDPGAVVLGKSLTERAQLLKNVFKKNHVNLYRSE SLQQNLLHGYAFSQDENGIVSQSEVIRAYDTTKQRPDEW

1133/2682 FIGURE 1026A

CGCCCTTAGCCGATCGGGGCGCTCAGCCCACACGCACCGCTGCTCGGGGCTTGGAGATCCGCGCAGGCTGGGCTC CCGGACGCGGACCGACGCGGGAGGATCGGGATCCGGCGCTGTGGGGCTGGGGTGGGCGGGGGAGGCTGGGC CCGGGGCCTCTGGCGCGACACCCGCATGAGGACGCGAGTGAAATAGACCAAGGTGGAATTTCCAAGGGAAAAGCT AAATAGATCTCTCGGCTCTGAGGGACCCTGCAGGGATCTTTGAATTGGTGGAACTTGTTGGAAATGGAACATACG GGCAAGTTTATAAGGGTCGTCATGTCAAAACGGGCCAGCTTGCAGCCATCAAGGTTATGGATGTCACAGGGGATG AAGAGGAAGAAATCAAACAAGAAATTAACATGTTGAAGAAATATTCTCATCACCGGAATATTGCTACATACTATG CTGTCACCGACCTGATCAAGAACACAAAAGGTAACACGTTGAAAGAGGAGTGGATTGCATACATCTGCAGGGAAA TCTTACGGGGGCTGAGTCACCTGCACCAGCATAAAGTGATTCATCGAGATATTAAAGGGCCAAAATGTCTTGCTGA CTGAAAATGCAGAAGTTAAACTAGTGGACTTTGGAGTCAGTGCTCAGCTTGATCGAACAGTGGGCAGGAAGAATA CTTTCATTGGAACTCCCTACTGGATGGCACCAGAAGTTATTGCCTGTGATGAAAACCCAGATGCCACATATGATT TCAAGAGTGACTTGTGGTCTTTGGGTATCACCGCCATTGAAATGGCAGAAGGTGCTCCCCCTCTCTGTGACATGC ACCCCATGAGAGCTCTCTTCCTCATCCCCCGGAATCCAGCGCCTCGGCTGAAGTCTAAGAAGTGGTCAAAAAAAT CATTTATACGAGACCAACCTAATGAGCGACAGGTCCGCATTCAACTCAAGGACCATATTGATAGAACAAAGAAGA AGCGAGGAGAAAAAGATGAGACAGAGTATGAGTACAGTGGAAGTGAGGAAGAAGAGGAGGAGAATGACTCAGGAG AGCCCAGCTCCATCCTGAATCTGCCAGGGGAGTCGACGCTGCGGAGGGACTTTCTGAGGCTGCAGCTGGCCAACA AGGAGCGTTCTGAGGCCCTACGGAGGCAGCAGCTGGAGCAGCAGCAGCGGGAGAATGAGGAGCACAAGCGGCAGC TGCTGGCCGAGCGTCAGAAGCGCATCGAGGAGCAGAAAGAGCAGAGGCGGCGGCTGGAGGAGCAACAAAGGCGAG AGAAGGAGCTGCGGAAGCAGCAGGAGAGGGAGCAGCGCCGGGACTATGAGGAGCAGATGCGCCGGGAGGAGGAGA GGAGGCGTGCGGAGCATGAACAGGAATACATCAGGCGACAGTTAGAGGAGGAGCAGAGACAGTTAGAGATCTTGC AGCAGCAGCTACTGCATGAACAAGCTCTACTTCTGGAATATAAGCGCAAACAATTGGAAGAACAGAGAACAAGCAG AAAGACTGCAGAGGCAGCTAAAGCAAGAAAGAGACTACTTAGTTTCCCTTCAGCATCAGCGGCAGGAGCAGAGGC TAGAAGAACGGTCAAGGCTCAACCGGCAAAGTTCCCCTGCCATGCCTCACAAGGTTGCCAACAGGATATCTGACC CCAACCTGCCCCAAGGTCGGAGTCCTTCAGCATTAGTGGAGTTCAGCCTGCTCGAACACCCCCCATGCTCAGAC ACGAGCAGCCCACAAAGGGCCTCTCTGGGTTTCAGGAGGCTCTGAACGTGACCTCCCACCGCGTGGAGATGCCAC GCCAGAACTCAGATCCCACCTCGGAAAATCCTCCTCTCCCCACTCGCATTGAAAAGTTTGACCGAAGCTCTTGGT TACGACAGGAAGAAGACATTCCACCAAAGGTGCCTCAAAGAACAACTTCTATATCCCCAGCATTAGCCAGAAAGA GGAGAACTGAGCCCATCTTGGAGAGCCCCTTGCAGAGGACCAGCAGTGGCAGTTCCTCCAGCTCCAGCACCCCTA GCTCCCAGCCCAGCTCCCAAGGAGGCTCCCAGCCTGGATCACAAGCAGGATCCAGTGAACGCACCAGAGTTCGAG CCAACAGTAAGTCAGAAGGATCACCTGTGCTTCCCCATGAGCCTGCCAAGGTGAAACCAGAAGAATCCAGGGACA TTACCCGGCCCAGTCGACCAGCTAGCTACAAAAAAGCTATAGATGAGGATCTGACGGCATTAGCCAAAGAACTAA GAGAACTCCGGATTGAAGAACAAACCGCCCAATGAAGAAGGTGACTGATTACTCCTCCTCCAGTGAGGAGTCAG AAAGTAGCGAGGAAGAGGAGGAAGATGGAGAGAGCGAGACCCATGATGGGACAGTGGCTGTCAGCGACATACCCA GACTGATACCAACAGGAGCTCCAGGCAGCAACGAGCAGTACAATGTGGGAATGGTGGGGACGCATGGGCTGGAGA CCTCTCATGCGGACAGTTTCAGCGGCAGTATTTCAAGAGAAGCATCTTGATGATTAGAGAGACGTCTGGAGAGA AGAAGCGATCTGGCCACAGTGACAGCAATGGCTTTGCTGGCCACATCAACCTCCCTGACCTGGTGCAGCAGAGCC ATTCTCCAGCTGGAACCCCGACTGAGGGACTGGGGCGCGTCTCAACCCATTCCCAGGAGATGGACTCTGGGACTG AATATGGCATGGGGAGCAGCACCAAAGCCTCCTTCACCCCCTTTGTGGACCCCAGAGTATACCAGACGTCTCCCA CTGATGAAGATGAAGAGGATGAGGAATCATCAGCCGCAGCTCTGTTTACTAGCGAACTTCTTAGGCAAGAACAGG CAGAAATCAGAAAATACAAGAAACGATTCAACTCAGAAATACTTTGTGCAGCTCTGTGGGGTGTAAACCTTCTGG TGGGGACTGAAAATGGCCTGATGCTTTTGGACCGAAGTGGGCAAGGCAAAGTCTATAATCTGATCAACCGGAGGC GATTTCAGCAGATGGATGTCCTAGAGGGACTGAATGTCCTTGTGACAATTTCAGGAAAGAAGAATAAGCTACGAG

1134/2682 FIGURE 1026B

TTTACTATCTTTCATGGTTAAGAAACAGAATACTACATAATGACCCAGAAGTAGAAAAGAAACAAGGCTGGATCA $\tt CTGTTGGGGACTTGGAAGGCTGTATACATTATAAAGTTGTTAAATATGAAAGGATCAAATTTTTGGTGATTGCCT$ TAAAGAATGCTGTGGAAATATATGCTTGGGCTCCTAAACCGTATCATAAATTCATGGCATTTAAGTCTTTTGCAG ATCTCCAGCACAAGCCTCTGCTAGTTGATCTCACGGTAGAAGAAGGTCAAAGATTAAAGGTTATTTTTGGTTCAC ACACTGGTTTCCATGTAATTGATGTTGATTCAGGAAACTCTTATGATATCTACATACCATCTCATATTCAGGGCA ATATCACTCCTCATGCTATTGTCATCTTGCCTAAAACAGATGGAATGGAAATGCTTGTTTGCTATGAGGATGAGG GGGTGTATGTAAACACCTATGGCCGGATAACTAAGGATGTGGTGCTCCAATGGGGAGAAATGCCCACGTCTGTGG CCTACATTCATTCCAATCAGATAATGGGCTGGGGCGAGAAAGCTATTGAGATCCGGTCAGTGGAAACAGGACATT CATCCGTGCGATCTGGAGGAAGTAGCCAAGTGTTTTTCATGACCCTCAACAGAAATTCCATGATGAACTGGTAAC AGAAGAGCACTTGGCACTTATCTTCATGGCGTTATTTCTAATTTAAAAGAACATAACTCATGTGGACTTATGCCA CAGTCCATCTTTCAATGTTGCAGCCTGGTTGAGAAGGAGAAAAAAGGTGGCAGGAATTTCCAGGAGATCCCCAA GAATGCTGCCTTGTCTGTGGACAAAGATGGACCATGTGCCCTTCGGAATTAGGGATAGAAACAAATATTGTGTGC TCTTAACGATTAAGCTGTGTTATGGTGGGTTTTCAGGTTTTTACCTTTTTTCTTTACCCCTTTACTCTGCAAGAA TGTAAAATTTCCAATGATGAGAGACAGCACAATAAATGTACCTTATCTCCTTAGGCTGAAGGCCATAACTACATA GTGGAGTAATTTAAGAACTCTCTTGCCTTCACCAACCCAAAAGGTTGCTTTTTGATAGCAACTGGCTAATGAATT TTTAAAAAGAGAAAAATACTAGTTTTCCCCTCTTTTGGGAAATAGATTTTAAATGGCTAAACTACTAGCCTT AAAACTACTAGTCTAATAAAATCAACTACCACTTTTGTGAATCTGACAGGCCACATTTTTATATGGCCCTTTACA GAATGGAGTGTTGAACAGGATACTAACGCCATTGAGTTGAGCTGGCCTAGCGATGGAGGGACACTCTAACACA TGGGAAACAAGCTTACATAGTCTTTTTTAAAATGCACAAAGCCTCCCAGCTAAGAGGTCACTTGGTTTGGGCTTC ATTAGGACTGAGACTTTGTTGAGTTCTTTCTGGGACTTGGAGAGTGGATGATATTCAGGCTCTGAACATTCCCAG CGCTCTCCCGAGGGTGCCACTTTCTCAAGATGAAAAACTGTGACTGAAAAAAATTAATAATAATGTTTCTGAGCTG CTCCAATTTTAGAGAACTTGAAAGCAAGGCTTTGGACAAAATTTTGAGACCCTAATCACTTTACCTTCCTCCAAA AACTCTTACTCAAATGATTTGAACTTT

1135/2682 FIGURE 1027

GAAAAAATGCAATACAAGAAGCAAGACCAAACAGATATCTAAACACTACAACCACTTCTACTACGAAAGGCCAA AACAGCAGACTTGATTGTGACATCAGGTGACCTAGTAATCAGCTGTGTATTCTAGCTGGTGCCTCTACCAGCTTC CCATGTGACCTTGAACATGTCATTGAATGCTCGCTAGGCCTCTGTTTCTTTATCTGTGAAATGGGCTTGATATTC GAGCAACAGTTCTGTTGTTCAGAATTCCTGGATTTCACCTCACTTCTGCTCTCCCTGCAGGTGAATGTGATGTTC TCTGCAATTGCATAGTTCAGAAGCCCTCACTTTTCAGCCCCGAGGATGGTTTTGTTCATCTTCCACCACCTTTGA CACACAAGGACGTCTGCGCAGCAAGAAAAGAATCTCAGTTGCCAAGCAGATTGATATCACACAGACTCAAAGCAA AGGCATGTGGAACTTCTATATTTCAAAACAGAAGTGTCTCCTTGCACTTAGCCTTGGCAGACCCTTGACTCCAGG GGAGATGACCTGGGGGAGGAAGTGTGTCAACTATTTCTTTAGGCCTGTTTGGCTCCGAAGCCTATATGTGCCTGG ATCCTCTGCCACGGGTTAAATTTTCAGGTGAAGAGTGAGGTTGTCATGGCCTCAGCTATGCTTCCTGGCTCTCCC TCAAGAGTGCAGCCTTGGCTAGAGAACTCACAGCTCTGGGAAAAAGAGGAGCAGACAGGGTTCCCTGGGCCCAGT CTCAGCCCAGCCACTGATGCTGGATGACCTTGGCCTGACCCTGGTCTGGTCTCAGAATCACTTTTCCCATCTGTA AAATTGAGATGAATTTTGGTGTTGAAAGTTCTTCCTGGAGCAGATGTCCTAGAAGGTTTTAGGAATAGTGACAGA GTCAGGCCACCCCAAGGGCCATGGGAGCCAGCTGACCTGCTTGACCGAAGGATTTCTGACAGACTATCTTTGGGG ATGTTTTCAAGAAGGGATATAAGTTATTTACTTTGGGCATTTAAAAGAAAATTTCTCTCGGGAATAATTTTATAG ΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑ

1136/2682 FIGURE 1028A

GGACAAAGTGAATACGGCTTTGCTGAAAAAGTAGTTGAGGGAATTTCTGTTTCTGTAAATTCTATAGTCATCAGA ATTGGAGCAAAAGCCTTCAATGCATCATTTGAACTTTCTCAGCTTCGGATCTATAGTGTAAATGCACACTGGGAA CAGATGATAAGAATAGAGGCAGATGCCACCCAAAGTTCACATCTTGAAATTATGTGTGCTCCTGTTCGATTAATA CTAATATTGGATGACTTATTATGGGTTTTGACTGATTCCCAGTTGAAAGCTATGGTACAATATGCAAAGTCTCTT AGTGAAGCAATAGAAAAATCAACAGAACAAAGGAAGAGTATGGCTCCTGAACCTACACAGAGCTCTACAGTAGTC GCATCTGCCCAGCAAGTGAAGACAACGCAAACTTCAAATGCTCCTGATGTAAATGATGCAATTGTGAAACTATTC AATGATTTTGATGTTAAGGAAACCTCCCATCATTTAGTGATTTCTCATCTAGATCTACACATATGTGATGACATT CATGCTAAAGAAAAGAGTCAAACAGACGTATTACTGGAGGGGCAATGCAACTCTCTTTTACACAGCTAACTATA GATTATTATCCTTATCATAAAGCAGGAGATAGTTGTAATCATTGGATGTATTTTAGTGATGCAACCAAAACAAAA AATGGATGGGCCAATGAGTTATTGCATGAATTTGAGTGCAACGTTGAAATGCTTAAACAGGCTGTGAAGGATCAT AAAGGGACATGCAGAACACCTTCAGTATTATCTCAACAATCAAAAGCTAAGCTAATGTCTAGTTCTGTTGTGGTT AGACTTGCAGATTTCAATATATACCAGGTCTCTACAGCGGAACAATGTCGTTCTTCCCCCAAAAGCATGATTTGC TGCAATAAAAATCCCTATATCTTCCACAAGAAATGTCAGCTGTCTATATAGAATTCACAGAATATTACTATCCA GATGGAAAGGATTTTCCAATTCCATCTCCCAACCTCTATAGCCAGCTGAATGCACTACAGTTTACTGTGGATGAA AGAAGCATTCTATGGTTAAATCAATTTCTGTTGGATTTAAAACAGAGTCTTAATCAGTTCATGGCTGTGTACAAG TTGAATGACAATTCAAAATCTGACGAGCATGTTGATGTTCGAGTTGATGCTTAATGCTAAAGTTTGTCATTCCT TCTGAAGTGAAATCTGAATGTCATCAAGATCAGCCACGTGCAATTTCTATTCAGAGTTCTGAAATGATTGCCACA AATACAAGGCACTGTCCAAACTGTCGACATTCTGACCTAGAAGCTTTGTTTCAAGACTTTAAAGATTGTGATTTT TTTAGTAAAACATATACCAGCTTCCCCAAATCTTGTGACAATTTTAATCTTCTACATCCAATTTTCCAGAGACAT GCTCATGAACAAGATACCAAAATGCATGAAATTTATAAAGGAAATATTACTCCCCAATTGAATAAAAACACTCTT AAAACTTCTGCTGCCACGGATGTTTGGGCTGTGTACTTTTCTCAATTTTGGATAGATTATGAAGGGATGAAAAGT GAGTCACAAAAAGAGCCGCAGACTTGTAATCAGGTATCTCTAAATACATCACAAAGTGAATCTAGTGATCTGGCT GGCCGATTGAAGCGGAAGAAGCTCTTGAAGGAGTATTATAGTACAGAGTCTGAGCCTTTGACAAATGGTGGTCAG AAGCCTTCTTCATCAGATACATTTTTCAGATTTTCCCCTTCCTCGTCAGAGGCAGATATTCATCTCCTAGTTCAT GTTCATAAACATGTCAGTATGCAGATTAATCACTACCAGTATCTGCTTCTACTTTTCCTGCATGAGTCACTTATC CTGCTTTCAGAGAACTTAAGGAAAGATGTAGAAGCTGTAACTGGCAGTCCTGCTAGTCAGACATCCATTTGTATT GTTTCTGAAAGTGTGAGCCCAGTGGTACCTGATTATTTGCCTACAGAAAATGGGGATTTTTTGTCTTCAAAAAGA AAACAAATTAGTAGGGATATAAATAGAATTAGAAGTGTAACTGTTAATCATATGTCAGACAACAGATCTATGAGT GTTGACCTTAGCCATATCCCTTTAAAGGATCCTTTGCTTTTTAAATCAGCTAGTGATACAAATCTGCAAAAAGGC ATTTCTTTTATGGACTATTTATCAGATAAACATTTAGGGAAAATAAGTGAAGATGAAAGTAGTGGACTTGTTTAC AAAAGTGGCTCAGGAGAAATTGGATCAGAAACAAGTGACAAAAAGGATTCATTTTATACAGATTCAAGTAGTATC TTAAACTACAGAGAAGATTCGAATATACTTTCATTTGATAGTGATGGTAATCAAAACATACTTTCAAGTACTTTA ACTAGTAAAGGAAATGAAACCATAGAGTCCATCTTTAAAGCTGAAGATTTGCTTCCAGAAGCAGCTTCACTCTCT GAAAACCTGGATATCAGTAAAGAAGAGACCCCCCCAGTTAGAACACTTAAATCACAGTCATCTTTAAGTGGAAAG CCTAAGGAACGTTGCCCACCCAACCTGGCTCCTCTGTGTTTCTTATAAGAATATGAAAAGAAGCTCTTCACAA ATGTCATTGGATACCATTTCACTTGACAGCATGATATTGGAAGAACAGTTATTAGAAAGTGATGGAAGTGATAGC CATATGTTTTTGGAAAAAGGAAATAAAAAGAACTCAACTACAAATTACAGGGGCACAGCAGAAAGTGTGAATGCT GGTGCAAACCTACAGAATTATGGTGAAACTTCTCCAGATGCCATCAGTACAAATTCAGAGGGTGCTCAGGAAAAT CATGATGACCTGATGTCCGTTGTGGTATTTAAAATTACTGGTGTTAATGGGGAAATTGACATCCGAGGGGAAGAT ACAGAAATCTGTCTTCAAGTGAACCAGGTGACACCAGACCAATTAGGCAATATCAGCCTTCGGCATTACCTTTGT AGTGGGCCTGGTGCTGTAATACACTCTTTACTTGCAGAAAAAAATGGATTTCTGCAGTGCCACATAGAAAAACTTC AGCACTGAGTTTCTTACATCTTCTCTTATGAATATTCAACATTTTTTGGAAGATGAAACTGTTGCAACAGTAATG

FIGURE 1028B

FIGURE 1029

CGGTCCGGACAGCCGCGCGCTGAGGGTCTCGGGGCCGGGGCCCGCGGGACCTCTCCGGGCCATGGCAGCCCCTGTC AAAGGGAACAGGAAGCAGTCCACGGAGGGTGACGCCCTAGACCCACCTGCATCCCCCAAACCTGCTGGCAAGCAG CATCTCGGCTTCAAGCAGATTAACCTGTGGAAGATCTACAAAGCAGTGGAGAAGCTGGGGGGCCTATGAGCTGGTG ${\tt ACCGGGCCCCCTCTGGAAGAACGTGTACGACGAGCTGGGGGGGCAGCCCAGGCAGCACCAGCGCGCCACGTGC}$ ACGCGCCGCCACTACGAGAGGCTGGTCCTGCCATACGTGCGGCACCTGAAGGGGGAGGATGACAAGCCGCTGCCC ACCTCCAAGCCCAGGAAACAGTACAAGATGGCTAAGGAGAACAGGGGGGATGATGGGGCCACCGAGAGGCCGAAG AAGGCCAAGGAGGAGCGGCGCATGGACCAGATGATGCCAGGAAAGACCAAAGCAGATGCTGCTGACCCAGCACCA CTTCCCAGCCAGGAGCCCCCAGGAACAGCACAGAACAGCAGGGCCTGGCCTCTGGGTCTTCTGTGTCCTTTGTG GGTGCCAGCGGCTGTCCTGAGGCCTACAAGCGGCTCCTATCCAGCTTCTACTGCAAGGGGACACACGGCATCATG TCACCACTGGCCAAAAAGAAGCTCCTGGCCCAGGTGAGCAAGGTGGAGGCCTTGCAGTGCCAGGAGGAGGAGGCCTGC $\tt CGCCATGGGGCAGAGCCCCAGGGGTCCCCAGCTGTTCACCTCCCAGAGAGTCCCCAGAGCCCCAAAGGGCTGACT$ AGCCAGCACCCCAGGGACTTCTTCTCTAGACTTAAAGATGGGGTGCTATTGGGGCCTCCTGGCAAAGAGGGGCTG TCAGTGAAAGAGCCCCAGCTGGTGTGGGGCGGAGACGCTAACCGCCCTTCTGCGTTCCATAAAGGTGGCTCCAGA AAGGGCATCCTCTACCCCAAGCCCAAAGCCTGCTGGGTGTCCCCCATGGCCAAGGTCCCAGCCGAGAGCCCCACG CTCCCGCCCACCTTCCCCAGTAGCCCAGGCCTGGGCAGCAAGCGCAGCCTGGAGGAAGAGGGTGCTGCCCACAGT ${\tt GGGAAGAGACTGCGGGCCGTGTCTCCCTTTCTTAAGGAGGCGGATGCCAAGAAGTGTGGGGCCAAACCTGCAGGG}$ ${\tt TCCGGCCTGGTCTCCTGCCTTCTGGGCCCAGCCCTGGGGCCTGTGCCCCCAGAGGCCTACAGGGGCACCATGCTG}$ CACTGCCCGCTGAACTTCACTGGCACCCCGGGCCCCTTGAAGGGCCAGGCTGCACTCCCCTTCAGCCCCCTGGTC ATCCCGGCCTTCCCGGCCCACTTCCTGGCCACCGCAGGCCCCTCGCCCATGGCCGCTGGCCTGATGCACTTCCCC ${\tt ACCTATGCAGCGCCCCACTTCTTCCACCTCAACACCAAGCTG} {\color{red}{\textbf{TAG}}} {\tt GCCAGCCCATGGTGTTGTACACTGTGGA}$ GGCCATGCCCCTGGCTGGGCAGCCTGGCACAAGTGAAGAAGAAGGCAGTGGGAAAACTGGGTTTATCTCAAGGCA GCAGCCTGAGCCCAGGAGCAGAGGACCCAGTTGTTATAAGGCGCTGGGAGAGGATGGGCAGCTCCCACTGCCCCA

1139/2682 FIGURE 1030

RSGQPRAEGLGAGAAGPLRAMAAPVKGNRKQSTEGDALDPPASPKPAGKQNGIQNPISLEDSPEAGGEREEQER EEEQAFLVSLYKFMKERHTPIERVPHLGFKQINLWKIYKAVEKLGAYELVTGRRLWKNVYDELGGSPGSTSAATC TRRHYERLVLPYVRHLKGEDDKPLPTSKPRKQYKMAKENRGDDGATERPKKAKEERRMDQMMPGKTKADAADPAP LPSQEPPRNSTEQQGLASGSSVSFVGASGCPEAYKRLLSSFYCKGTHGIMSPLAKKKLLAQVSKVEALQCQEEGC RHGAEPQASPAVHLPESPQSPKGLTENSRHRLTPQEGLQAPGGSLREEAQAGPCPAAPIFKGCFYTHPTEVLKPV SQHPRDFFSRLKDGVLLGPPGKEGLSVKEPQLVWGGDANRPSAFHKGGSRKGILYPKPKACWVSPMAKVPAESPT LPPTFPSSPGLGSKRSLEEEGAAHSGKRLRAVSPFLKEADAKKCGAKPAGSGLVSCLLGPALGPVPPEAYRGTML HCPLNFTGTPGPLKGQAALPFSPLVIPAFPAHFLATAGPSPMAAGLMHFPPTSFDSALRHRLCPASSAWHAPPVT TYAAPHFFHLNTKL

1140/2682 FIGURE 1031

GATTTCTTTTAGTCATGTTGATTTGATTTCAGTTTCTGGCTATGAAAAACATTTTTAAACTCGTCACCCACAACA **AACTGAACAAACTACTACAGTGAAAGCCCTTTTCAGTGAAAGATGTCAGAAACCTCAAAACCTTTGGCCTGACT** TGATGTGTTTGCTATCTGCTGTTTTCTGTTACCTGTTGGCTGAATGGCTAGCTGTTAACATATACATGTGCACA GAAGAGATATCTGGGCATGTATGTTCTCAATGAAGTTTACTGTGGTGACTGCTGAAAGGTGAACCCATTTCCTGA TTTTTCCCGCCGCAGTGTTGTGATAAGATTCGAAGAAACCTTTTTCCCTGCACAGAAATGTTTCTTATCACATTG ACACACACACACACACTCTGTATGTTTAGACCTAAAATACACACCCACGCACACACTGTATGTTTATGTGA TGTGTCACTGTTTATGCAGTTTCCATTTCCCAGTGAATTATGAGTGGAGGGCAACTTTTCTAACCAGATTGTCTT TTCAGAACAAAGACCTGGGAATTGAGGAAGAGTTTGGAAAGAGGGAGAGGCAAGGAAAGAAGAGCTTTAAATTGAA AGGTTAATTTCCTAAGAGGAACCTGGGCTGAATGACTACAGTGTTATACCCTCCAATCTTTGCAGGTGGGCATGG TTGTTGTCAGTTATCAAACAAACAAACAGAAAATTGTTTGGAAAAACCTTGCATACGCCTTTTCTATCAAGTGC TTTAAAATATAGACTAAATACACACATCCTGCCAGTTTTTTCTTACAGTGACAGTATCCTTACCTGCCATTTAAT AAAAAAGAAAATTAACTGTAGCGCTTCATTATACTATTATTATTATTATTATTGTGACATTTTGGAATACTG TTTAAATGTTACCAGCACTTTTTTTGTAAGTTTCACTTTCCGAGGTATTGTACAAGTTCACACTGTTTGTGAAGT AAAAAAAAAAGGGCGGCCG

FIGURE 1032

ATGACGGTGGGCAAGAGCAGCAAGATGCTGCAGCATATTGATTACAGGATGAGGTGCATCCTGCAGGACGGCCGG
ATCTTCATTGGCACCTTCAAGGCTTTTGACAAGCACATGAATTTGATCCTCTGTGACTGTGATGAGTTCAGAAAG
ATCAAGCCAAAGAACTCCAAACAAGCAGAAAGGGAAGAGAAGCGAGTCCTCGGTCTGGTGCTGCGAGGGGAG
AATCTGGTCTCAATGACAGTAGAGGGACCTCCTCCCAAAGATACTGGTATTGCTCGAGTTCCACTTGCTGGAGCT
GCCGGGGGCCCAGGGATCGGCAGGGCTGCTGGCAGAGGAATCCCAGCTGGGGTTCCCATGCCCCAGGCTCCTGCA
GGACTTGCTGGGCCAGTCCGTGGGGTTGGCGGGCCATCCCAACAGGTGATGACCCCACAAGGAAGAGTACTGTT
GCAGCCGCTGCAGCTGCTGCCACAGCCAGTATTGCCGGGGCTCCAACCCAGTACCCACCTGGCCGTGGGGTCCT
CCCCCACCTATGGGCCGAGGAGCACCCCCTCCAGGCATGATGGGCCCACCTCCTGGTATGAGACCTCCTATGGGT
CCCCCAATGGGGGATCCCCCTTGGAAGAGGGACTCCAATGGGCATGCCCCCTCCGGGAATGCGGCCTCCTCCCCCT
GGGATGCGAGGCCTTCTTTGA

1142/2682 FIGURE 1033

MTVGKSSKMLQHIDYRMRCILQDGRIFIGTFKAFDKHMNLILCDCDEFRKIKPKNSKQAEREEKRVLGLVLLRGE NLVSMTVEGPPPKDTGIARVPLAGAAGGPGIGRAAGRGIPAGVPMPQAPAGLAGPVRGVGGPSQQVMTPQGRGTV AAAAAAATASIAGAPTQYPPGRGGPPPPMGRGAPPPGMMGPPPGMRPPMGPPMGIPPGRGTPMGMPPPGMRPPPP GMRGLL

1143/2682 FIGURE 1034A

GGTCTTCAGGAGAGCCAGGAGAGGCCAGTTGTCACGTGCCTGAAACATGAGGACTTCGAGTTGGCTTTCCTTCTC TTTCTAGAGATTAAAGCTGACATTGGTTTTAGCTTCCTCAGCCATCTGTTTGGATCTGTTTTGGTCCAACCCCACT GAATTCGACTACCTCAACCCCAATGTCCAGGACAGCAATGGGAACACGCTGATGCACATCCTCTTCCAGAAGGGC ATGCTAAAGCGCGTGAAGAAGCTGTTAGACCTGCTGGTGAAGTTTGACATCAACTTCAATCTGAAGAACAAAGAG GGCAAAGATGCACGGCACCGGATTAAGAAGAACGACTCTCTGCTCTTGGCCTGGAACAAAGCTCTGATGGAGAAC AGGAGGAGGAGCCGGCAGGACTCTGCCGCCACCTGGGGAAGCTCTCAAAGTCCACTGCCCCTGGTCACACATCT $\tt CTGAGAGACTGCCTTATGCAGGACATCACAGTTTTGATTCAGCAGGTTGAAGTGGATCCGTCTTTCCCAGAGGAC$ GCAGGGCCCCTGACTGTAGTGAGGTGGGGGAAGGACATGCTCAGGTGGGTCTTGGGGCCTTGCAGCTTGTGCCT GACTTCGATAACATGACCTGGGAGATCGAGTGCACTTCAGAAATGCTGAAGAAGCTGTCTAGTAAGGTAATGACC AAGGTCATCAAGAAGAAAATCATCCTTGCCATTCAGCAGCTGGGAAATGGCGAGTGGACCCAGGGCCTGCAGAAG CGACTGAAGCACCTGAAAGGAAGCATCCAGCTCTTCGAAGCTAAGCTGGACAAAGGAGCCCGGATGCTCTGGGAG CTCGCCATTGACTTCTCCCCTCGATGCAGTGAGAACCCTGAGAAGATCATTGCCACGGAGCAGAACACGTGTGCA ATGGAGAAATCAGGGCGGATCTACACGGAAATCATCCGGATTTGGGACATCGTCTTAGATCACTGCAAACTGGCT GATTCCATCAAGGCCATCTGCAATGCCTACAACCGGGGCTTGTCCTGTGTCCTGCGGAAGAAGCTGAAAGGTATC **AATAAAGGCCAAGTGTCAGCTAACATGAAAATTCAAAAGCGTATACCTCGCTGCTATGTGGAGGACACAGAGGCC** AAGTTCCACAGCTTCAGCACCAACATGGCCTTTAACATCCTCAATGACACGACAGCCACAGTGGAGTACCCCTTC CGGGTGGGTGAGCTTGAGTACGCGGTGATCGACCTCAATCCCAGGCCACTGGAGCCCATCATCCTTATTGGGCGA AGTGGCACTGGGAAGACAACCTGCTGCTTGTACAGATTGTGGAAGAATTCCACGTTTACTGGGAAAAAAGCTGAG CAGGCAGGAAGCCCATTGCTGGCCAAACAGGTCTGGCTGAAGAGAAGGTTGGAAGTGGAACCCGGAAAAGAGAGT CCAGGTGGGGAGGAGGGGGGGGGAGGAGGACGAGGAAGAGTTCTATTGAAGTGGAAACAGTAGAAAGC ATAGATGAGCAGGAGTATGAAGCCTGCGCAGGAGGAGCCGGTGTGGAGCCAGCAGGAGCCGACCTGCAGAA GTATGTGCACCAGAACATCCCCACCAGCTGGAGCATTTACATCAGATCTTTGTGACCAAGAACCATGTGCTGTGC CAGGAGGTACAAAGGAATTTCATTGAGCTTTCCAAGTCCACCAAGGCCACTAGTCATTACAAACCACTGGACCCC AACATTCACAAACTCCAGGACCTGAGGGACGAGAACTTTCCTCTGTTTGTCACTTCCAAGCAGCTGCTTCTTCTG CTTGATGCTTCTCTGCCCAAACCATTTTTTCTGAGAAACGAAGATGGAAGCTTGAAAAGAACCATCATAGGATGG TCTGCACAGGAAGAGTCAACCATTCCTAGTTGGCAAGAGGATGAAGAGGAGGCTGAGGTGGATGGGGACTACAGT GAGGAGGATAAAGCTGTAGAAATGCGTACGGGTGACAGTGACCCCCGGGTGTACGTGACGTTTGAGGTGTTCAAA TTTCTAAAGGGTTCTTTTGAGGCCCTCAGCTGTCCCCATGGGAGACTCACTGAAGAAGTATATAAGAAATTAGGG <u>AGGAAACGGTGCCCCAATTTCAAGGAAGACCGGAGTGAGATCTACAGCCTCTTCAGTCTGTATCAGCAAATCAGG</u> TCCCAGAAAGGTTATTTTGATGAAGAGGATGTTCTGTACAACATATCCCGGAGGCTGTCGAAGCTCAGGGTGCTC CCATGGTCCATCCACGAGCTCTATGGTGATGAGATTCAAGACTTTACCCAGGCCGAGCTGGCGGCTGCTGATGAAA TGCATCAATGACCCCAACTCTATGTTCCTCACGGGGGACACGGCCCAGAGCATCATGAAGGGCGTGGCCTTCCGC TTCAGCGATCTGCGCTCTCTGTTCCATTATGCCAGCAGAAACACCATAGACAAGCAGTGTGCTGTCCGGAAGCCC **AAGAAGATCCACCAGCTGTACCAGAATTACAGGTCCCACTCAGGAATCCTCAATCTGGCATCTGGAGTGGTGGAT** TTACTTCAGTTCTATTTCCCAGAATCTTTTGATCGCCTTCCAAGGGATTCTGGCCTCTTTGATGGTCCTAAGCCA ACTGTTCTGGAGTCTTGTAGTGTAAGCGACTTGGCAATTTTGCTACGAGGGAATAAAAGGAAAACTCAGCCCATT GAATTTGGAGCCCACCAGGTAATCCTTGTGGCCAATGAAACGGCAAAGGAGAAAATTCCAGAAGAGCTGGGGTTA GCACTTGTGCTAACAATTTATGAAGCAAAAGGCTTAGAATTTGATGATGTCCTCCTTTACAACTTTTTTACTGAT CCATTGGTTGAAGTACCCCTGGACAAACCAGGCTCTTCTCAGGGTCGATCTCTCATGGTGAATCCAGAAATGTAC AAGCTCCTCAACGGAGAGCTGAAGCAGCTGTACACCGCCATCACACGGGCTCGGGTCAACCTCTGGATCTTTGAT

FIGURE 1034B

GAAAACCGAGAGAAACGGGCTCCCGCATTCAAATATTTCATTAGAAGAGATTTTGTCCAAGTTGTAAAGACAGAT GAAAATAAAGACTTTGATGATAGCATGTTCGTTAAGACCTCAACTCCTGCGGAGTGGATTGCACAGGGAGATTAC TACGCCAAGCACCAGTGCTGGAAGGTTGCAGCCAAGTGTTACCAGAAAGGAGGTGCATTTGAGAAGGAGAAGTTG GCCCTGGCCCATGACACTGCCCTGAGCATGAAATCCAAGAAAGTCAGCCCCAAGGAAAAGCAGTTGGAATATTTG GAATTGGCTAAGACCTATTTGGAGTGCAAAGAGCCAACACTGTCCCTTAAGTGTCTGAGCTATGCCAAGGAGTTC CAGCTCTCTGCCCAGCTGTGCGAGAGGCTGGGAAAGATAAGAGATGCTGCCTATTTCTATAAGCGAAGCCAGTGC TACAAAGACGCTTTCAGATGCTTTGAGCAGATTCAGGAATTTGATCTAGCACTCAAAATGTACTGCCAAGAGGAG CTTTTTGAAGAAGCTGCTATTGCAGTGGAAAAGTATGAAGAAATGCTAAAGACTAAGACCCTTCCCATTTCCAAG $\verb|CTCTCCTATTCTGCCAGTCAGTTTTACTTGGAAGCTGCAGCAAAGTATCTGAGTGCAAATAAGATGAAGGAAATG| \\$ ATGCCTGTCCTCTCAAAGCTAGACATAGAAGACCAGCTGGTGTTCTTGAAGTCTCGGAAACGCTTAGCAGAAGCT GCAGACCTGCTGAACAGGGAAGGTAGGAGAGAAGAGGCTGCCCTGCTGATGAAGCAACATGGCTGCCTCCTGGAG GCTGCCAGGCTCACTGCCGACAAGGACTTCCAGGCCTCATGTCTGCTGGGGGCCCGCCTCAATGTGGCCAGG GATTCCGACATAGAACACCAAGGACATTCTGAGAGAAGCACTTGATATCTGCTATCAAACTGGCCAGTTGTCT GGCATTGCGGAGGCCCACTTCCTGCAAGGGGTAATCCTGAGAGACTTTCAGAAGCTCAGGGATGCCTTCTTCAAG GAGAAGATTCTGGGCCTGGCTCCAGGGGGCTTGGAAATCCTCCTCAGTCTGGTCAGGGCTCTCAAAAGAGTGACC AACAATGCTGAGAAGGAAATGGTCAAATCTTGCTTTGAGTTTTTTGGGATTCCCAGGTGGATGCCAAGTATTGC CAGATAGCTCAGAATGACCCTGGGCCCATATTAAGAATAATTTTTGACCTGGATTTGAACTTGAGAGAAAAAAA ACAAAAGATCATTTTTTGATAATGACTGACCAAGTGAAATTAGCCCTAAACAACACCTTTTGGGCAGGCTGTGT CAGATCACACGGAGCCTGCTTGGGAAGACCTACCGAGGAGTCTGCATGAGGTTTATTGTAGGCTTAAAATGTGAG GATGAAAACTGTGAACATTTTCACAGGCCTCTGCGGCGTTGTGAAGCCAAGTGTTTAGTTCAGTCGAAAATGAAC TTGGTGGCAATCAACGGGTTGCTTTTGGAAGCCAAAAAAGTATTCCCTAAAATCTTAGCAGAAGAACTTAAAGAA ATTGATTATATTTTGTCTACAGATATGTATGGCCTTTGCAAGTCCATTCTGGATGTCCTTTTCCCTAAGCATTTC CATCAGAGAGTGTTGTCAGAAAACCCCATGGCATGCAAAGAAATCCTCAAACCAAATTACAAATCCTTCCGGTTC GACCTGTGGCTGAGTGCCATGCAAGCTTTCCTTCTCTTCCAACTACCCGGAGGAGTTTGAAAAGCTGCTCCAC CAGGAGGAGACAACTACAACAGGGAACTCAAAGCTCTAGAGTCTGAAAAGGATGAAAAGGGCCAGGGGGAGAGGC AGCAGGATAAAAGGAATAGAAGGGAAATTTGGCATGCTGGCACCCAACAGGGATGATGAAAATATGGACAAGACC CACCTGTGCTTCATCCGGCTTCTGGAGAATTGCATTGATCAATTCTACGTGTACAGGAACCCAGAAGACTACAAG AGGCTCTTTTTCCGTTTCATGAATGTCCTCATCAAGAGGTGCAAAGAACCACTCATCCCCAGCATTGGAAACACA GTAGCCCTCCTGGAGTTCCAGTTCATCCACTGTGGGGTGGTGCTGGCCCGCCTCTGGAAGAATGTCATTCTATGC CTCCCCAAGAGCTACATTGCACTCTTGCACTACTGGGAGTTCCTGTTTAGCAAGAAGGACAAGGAGCTTGGGGAT GTGTTCTCCATCATTCAGGAATACAAACCCAAGGACGTGACAAGAGCCATTCAGGATTTCCGGTTCCATCTCTCC TACCTCGCCAAGGTGCTATGTGGCTATGAGAATGTGAACTTCAACGTCCTGCTTGATGCCTTCAGTGAAATAGAC TATGTGGTCTCGGGTGAGGCTGAGCGGACACTGGTGCTTGGTGATGCTAGTGAATGCTGAGGAGATCCTG CAGCCATACTGCAAGCCTCTCCTGTATCGCCACTTCCGGGAGATTGAGCTCAAGGCTGCAGCTCATGAGCATGGAC TGCCCTGGCCAGGTTCCCGAGAGGCTCCTGAAGGTGGTGAAGCGGGTCTTGGTGGCAGTCAATGTGAAGTCTGTG GCTGAGGCACTGCAGGACCTGCTCTTTGAGCGGGATGAAGAGTACCTAATGGACTGTGACTGGCGGTGGGACCCT GTGCACACCAAAGGGTCCATAGTCCGTGGCCTCTATTATGAGGAGGTCAGACTAAACCGCCTGCTCTGTTTGGAC GACCACGTCCTGGCCACCATTCTTTCCCAAAAGCAACGGAAGGCCTCCATACAGCGGAAGTTGAGGAGGGCATGC CTGGTGGTGTCTCTGTGCATCAGTTGGAGGAGAGAGAGGGCGCCCCAGATGGAGCGTGTCAGGGAGGAGGCCAGG GAGCCCAGGGCTGGGAACTTCAAAAAGGCAGACGTGGACCCAGTGTGACCTATGTGGAGTGAAGTTTACC CGTGGCCCAGAGAACTATTTCAGCCCCAGCAAAGCGTTTGAGGGGGGCAGCTTCCGAGGTGGCAGTCCTTTCCAGG GCTGAGCTGGAAAGGGAGGGTGTCAGGAGAGGAACAGCGAGTCTTACGAGCAGCATATCCATCTAGAACACCAC CAGAGGCAGCAAGTGGCCTACCAGAAATACTCAGAAATTTTTCCACGAGAAGGTGGACCCGGCCATTGATGAAGGC AAGCTGGTGGTGCAGGACATCGAGCAAAGTGTATGGATCCACAGTCACGTGGGCTCCAAGGAGCACAGCCACATG CTGCAGAAGGTCCAGGAGCACATCAAGAGGGTTTCGGATATGGTGGAGGACCTCTACAGGCGGAAGGCCTGGGCT

1145/2682 FIGURE 1034C

AAAACAGAGACCCGCTTAAAGAAGGAAGGTATTGTTCAGGAAGATGATTATGAAAATGAAGTTGAAGACTTTGGT GAGCTTCGGCCTAGAAGGCGTTCTCGGAAATGTGGAAAGCAGAGAAAATAC<u>TAA</u>TGTCCACACAGCTGCAGCCTC CTCATCCTTCGGAACATTCCATTCTGACTTAGAATTCTGAGCGCTGGGGCAGAAGACAAAAAGAATGTGAATTAG CATTTTAAAAATAGGGGAGTCTAACAACACCATTGCTTTTTATTCTCATTACTTCTCTTTCAGTGGCTTAGGATC TAGAGAAGTTGTAGTCGAAGGGAATGTTGGGACTCCTCACTGCATGGTCCCTGGGGTGTCTGGCTCATCCCCATC ATGACGTGAGTTGGTAGCAGAGGACTAGGTGTTAGGACAGACTCTCCTCACCTCAGTTGCTGCTCCTCTGGGCCA GGAAATCTCTCTATGGATTCCCTCATCTCCTGCCACACTGCTGCAGCATCAAGTGTGCTATGAGAGCTGTATGTG CCCAGGGGTGGCCCTGCCACTGGCCACCCGAGCCCAGGACGCATTCTGGTCATCTCTGAGCCCACTTGTAGTG TAGCTTCTTCTGTTAGAGATGTTAGCCTTTTCTCTCTGTGGCGACTTTTCTGCCTTCCCTTCTTCTGTTTTTTGT GATCATTCTTAGCTACCTGTGCCAAGTCACAGTTAGACTACCTCAGAATGTAGTCAAGAATTCACCCAGTGTTCT TTGGATGTCCCTTCCCTAGGGGGAAAGGCTGGGGAATGTTGCTGGGAGCATTCCCAGCTGCCTCTCCAAAGTGGT CCTAACTCTGCCTTGGCTATGGTGCAGACATTCCAAAAAGTGTTTTGTATACAGCCCTGTACATCTAGTTTTCTT GTGGGATGGTGACCTGCAGAGCTGCAGATTGGAGCAAGTGGACAGGAGGAGCCAGCTAAGCCAAATCCGTCA CTGCCACTTGGCTGGCAGGCCTTATAAGAGGGCGGATCTGGGCCCGTTTGCAGGAGGCCATTGCCTACCCTCTCC CCACAGTGAGCCAGCCATCAGCTGATCCCACCTGGGAAACCTTCATGCCTCTGATGGTTACTGCCCACCC TTACCCCACCCTCAGCTCAGCCTGGTATGGAAAGCAAGGTGCACGTTGGTCTTTGATTGTTCTGTCCTCACAGC AGAGCCAGCTTTCCCCCCATGTTGCTGCTGCTTTTGCTGCTCATGCTGCTTGTTGTTTTCTCTTATCTTTC CAAATTGTTTCCTTGAAATGCTTGTTTCCAATTTTTCTTAGATTATGTTTCTAATTTTTATTCCAGGTGTTTTTT TTTCTTACTTGACAGAAAAAAAGAAAACCCCAACAATATCTTGCTGTATTATCACATTTTTTATAAAGTTAAAGC ATTTCTCTT

FIGURE 1035

GSPKRGRAYKEWKIISSFTPTSTDSREENRPLVEVPLDKPGSSQGRSLMVNPEMYKLLNGELKQLYTAITRARVN LWIFDENREKRAPAFKYFIRRDFVQVVKTDENKDFDDSMFVKTSTPAEWIAQGDYYAKHQCWKVAAKCYQKGGAF EKEKLALAHDTALSMKSKKVSPKEKQLEYLELAKTYLECKEPTLSLKCLSYAKEFQLSAQLCERLGKIRDAAYFY KRSQCYKDAFRCFEQIQEFDLALKMYCQEELFEEAAIAVEKYEEMLKTKTLPISKLSYSASQFYLEAAAKYLSAN ${\tt KMKEMMAVLSKLDIEDQLVFLKSRKRLAEAADLLNREGRREEAALLMKQHGCLLEAARLTADKDFQASCLLGAAR}$ LNVARDSDIEHTKDILREALDICYQTGQLSGIAEAHFLQGVILRDFQKLRDAFFKFDTLNHSAGVVEALYEAASQ CEAEPEKILGLAPGGLEILLSLVRALKRVTNNAEKEMVKSCFEFFGISQVDAKYCQIAQNDPGPILRIIFDLDLN LREKKTKDHFLIMTDQVKLALNKHLLGRLCQITRSLLGKTYRGVCMRFIVGLKCEDENCEHFHRPLRRCEAKCLV QSKMNLVAINGLLLEAKKVFPKILAEELKEIDYILSTDMYGLCKSILDVLFPKHFHQRVLSENPMACKEILKPNY KSFRFYRFALKEYIHFLFENESARNRRESTDLWLSAMQAFLLSSNYPEEFEKLLHQEEDNYNRELKALESEKDER GRGRGSRIKGIEGKFGMLAPNRDDENMDKTHLCFIRLLENCIDQFYVYRNPEDYKRLFFRFMNVLIKRCKEPLIP SIGNTVALLEFQFIHCGVVLARLWKNVILCLPKSYIALLHYWEFLFSKKDKELGDVFSIIQEYKPKDVTRAIQDF RFHLSYLAKVLCGYENVNFNVLLDAFSEIDYVVSGEAERTLVLCLVMLVNAEEILQPYCKPLLYRHFREIESRLQ LMSMDCPGQVPERLLKVVKRVLVAVNVKSVAEALQDLLFERDEEYLMDCDWRWDPVHTKGSIVRGLYYEEVRLNR LLCLDPVDYFAEPECEFGQDEMDELALEDRDHVLATILSQKQRKASIQRKLRRACLVVSLCISWRRRVGTQMERV REEAREPRAGNFKKADVDRTQCDLCGVKFTRGPENYFSPSKAFEGAASEVAVLSRAELEREECQERNSESYEQHI HLEHHQRQQVAYQKYSEFFHEKVDPAIDEGKLVVQDIEQSVWIHSHVGSKEHSHMLQKVQEHIKRVSDMVEDLYR RKAWAGAEEAMTRLVNILILSVRDARDWLMKTETRLKKEGIVQEDDYENEVEDFGELRPRRRSRKCGKQRKY

1147/2682 FIGURE 1036A

GGCCGCGAGTGCATCTTCCACGAACCTAATTCATCTCTCCAGCAAAGGACACATCTCTCCAGCAAAGGACACCTC TCTCCAGCAAAGGACACCTGCAGAGATGTCCCCAGTCCTTCACTTCTATGTTCGTCCCTCTGGCCATGAGGGGGGC AGCCTCTGGACACTCGGAGGAAACTGCAAGGGAAACTGCCAGAGCTGCAGGGCGTCGAGACTGAACTGTGCTA CAACGTGAACTGGACAGCTGAGGCCCTCCCCAGTGCTGAGGAGACAAAGAAGCTGATGTGGCTGTTTGGTTGCCC CAGGCTGAACTTCTCCACCCCAACATCCACCAACATCGTGTCAGTGTGCCGCGCCACTGGGCTGGGGCCTGTGGA TCGTGTGGAGACCACCCGGCGCTACCGGCTCTCGTTTGCCCACCCCCCGTCAGCTGAGGTGGAAGCCATTGCTCT GGCTACCCTGCACGACCGGATGACAGAGCAGCACTTCCCCCATCCCATCCAGAGTTTCTCCCCTGAGAGCATGCC GGAACCCCTCAATGGCCCTATCAATATACTGGGTGAGGGCCGGCTTGCGCTGGAGAAGGCCAACCAGGAGCTTGG TCTGGCTTTAGACTCTTGGGACCTAGACTTCTACACCAAGCGCTTCCAGGAGCTACAGCGGAACCCGAGCACTGT GGAGGCCTTTGACTTGGCGCAGTCCAATAGCGAGCACAGCCGACACTGGTTCTTCAAGGGCCAGCTCCACGTGGA TGGGCAGAAGCTGGTGCACTCACTGTTTGAGTCCATCATGAGCACCCCAGGAATCCTCGAACCCCAACAACGTCCT CAAATTCTGTGATAACAGCAGTGCAATCCAGGGAAAGGAAGTCCGATTCCTACGGCCTGAGGACCCCACACGGCC AAGCCGCTTCCAGCAACAGCAAGGGCTGAGACATGTTGTCTTCACAGCAGAGACTCACAACTTTCCCACAGGAGT ATGCCCCTTTAGTGGTGCAACCACTGGCACAGGGGGCCGGATTCGAGATGTCCAGTGCACAGGCCGCGGGGCCCA CGTGGTGGCTGCCACTGCCGGCTATTGCTTTGGAAATCTGCATATTCCAGGTTACAATCTGCCCTGGGAGGATCT AAGCTTCCAGTATCCTGGGAATTTTGCCCGGCCCCTGGAGGTTGCCATTGAAGCCAGTAATGGAGCTTCTGACTA TGGCAACAGTTTGGGGAACCAGTGCTGGCTGGCTTCGCCCGCTCCTTGGGCCTCCAGCTCCCAGACGGCCAGCG GCGTGAGTGGATCAAGCCCATCATGTTTAGTGGGGGCATTGGGTCCATGGAAGCTGACCACATAAGCAAGGAGGC CCCAGAGCCAGGCATGGAAGTTGTAAAGGTTGGAGGTCCCGTCTACAGGATTGGAGTTGGAGGTGGAGCTGCTTC ATCTGTGCAGGTGCAGGGAGATAACACCAGTGACCTGGACTTTGGGGCTGTGCAGCGAGGAGACCCGGAGATGGA ACAGAAGATGAACCGTGTGATCAGGGCTTGTGTGGAGGCCCCCAAGGGAAACCCCATCTGCAGCCTTCATGATCA GGGCGCTGGTGGCAATGGCAATGTCCTAAAAGAGCTGAGTGACCCAGCTGGAGCCATCATTTACACCAGCCGCTT CCAGCTTGGGGACCCAACCCTGAATGCCCTGGAAATCTGGGGGGCTGAGTACCAGGAATCAAATGCTCTTCTGCT CACTGGAGACCGGAGAATAGTGCTGGTGGACGATCGGGAGTGTCCTGTCAGAAGAAATGGCCAGGGGGATGCCCC CCCGACACCCCGCCAACCCCTGTGGACCTGGAGCTCGAATGGGTGCTGGGCAAGATGCCTCGGAAGGAGTTCTT CCTGCAGAGGAAGCCCCCCATGCTGCAGCCTCTGGCCTTGCCCCCAGGGCTGAGCGTGCACCAGGCTCTGGAGAG GGTTCTGAGGCTGCCCGCCGTGGCCAGCAAGCGCTACCTCACCAATAAGGTGGACCGCTCCGTGGGAGGCCTGGT GGCCCAGCAGCAGTGCGTGGGGCCCCTGCAAACTCCTCTGGCAGATGTAGCGGTTGTGGCACTGAGCCATGAGGA GCTCATAGGGGCTGCCACAGCCTTGGGAGAACAGCCAGTCAAGAGCCTGCTGGACCCAAAAGTCGCCGCCCGGCT GGCCGTGGCCGAAGCCTCACCAACCTGGTGTTTGCTCTGGTCACTGACCTCCGGGATGTGAAGTGTAGCGGGAA CTGGATGTGGGCAGCCAAGCTCCCAGGGGAGGGCGCAGCTTTGGCGGATGCCTGTGAGGCTATGGTGGCAGTGAT GGCAGCCCTGGGTGTGCCAGTGGTGGCAGGACTCCCTCAGCATGCTGCTCGGGTTGGCACTGAGACCGT GCGGGCTCCTGGGTCACTGGTCATCTCAGCCTATGCCGTCTGCCCAGACATCACAGCCACTGTGACCCCAGACCT CAAGCATCCTGAAGGGAGAGGCCATCTGCTCTATGTGGCTCTGAGCCCTGGGCAGCACCGGCTCGGGGGCACAGC TCTGGCCCAGTGCTTCTCCCAGCTTGGGGAACACCCTCCAGACCTGGACCTTCCTGAGAACTTGGTGCGGGCCTT CAGCATCACTCAGGGGCTGCTGAAAGACCGCCTCCTCTGCTCAGGCCACGATGTCAGTGACGGAGGCCTCGTCAC ATGCCTGCTGGAGATGGCCTTTGCTGGAAATTGCGGGCTACAGGTGGATGTGCCTGTCCCCAGGGTTGATGTCCT GTCTGTGCTGTTCGCTGAGGAGCCAGGCCTCGTGCTGGAGGTGCAGGAGCCAGACCTGGCCCAGGTGCTGAAGCG TTACCGGGATGCTGGCCTCCATTGCCTGGAGCTGGGCCACACAGGCGAGGCCGGGCCCCACGCCATGGTCCGGGT GTCAGTGAACGGGGCTGTGGTTCTGGAGGAGCCTGTTGGGGAGCTGCGAGCCCTCTGGGAGGAGACGAGTTTCCA GCTGGACCGGCTACAGGCAGAGCCTCGCTGTGTGGCAGAGGAGGAACGGGGCCTGAGGGAGCGGATGGGGCCCAG CTATTGCCTGCCCCCCCCCTTTCCCAAAGCCTCCGTGCCCCGTGAGCCTGGTGGTCCCAGCCCCGAGTCGCCAT CTTGCGAGAGGAGGCAGTAATGGAGACCGGGAGATGCCGATGCCTTCCACTTAGCTGGGTTTGAGGTATGGGA CGTGACCATGCAGGACCTCTGCTCTGGGGCAATTGGGCTGGACACTTTCCGTGGCGTGGCCTTCGTGGGCGGCTT CAGCTATGCAGATGTCCTGGGCTCTGCCAAAGGGTGGGCAGCTGCTGTGACCTTTCATCCCAGGGCTGGGGCTGA GCTGAGGCGCTTCCGGAAGCGGCCAGACACCTTCAGCCTGGGCGTGTGTAATGGCTGTCAACTGCTGGCTCTGCT

1148/2682 FIGURE 1036B

GATGCTGCGAGGGATGGAGGGCGCCGTGCTGCCCGTGTGGAGTGCGCACGGGGAAGGTTACGTAGCATTTTCTTC TCCGGAACTCCAAGCTCAGATTGAGGCCAGGGGCTTGGCTCCACTGCACTGGGCTGATGATGACGGGAACCCCAC GGCTGTCATGCCTCACCCTGAGCGGGCCGTTAGGCCTTGGCAGTGGGCATGGCGACCCCCTCCATTTGATACTCT GACCACCTCCCCTGGCTCCAGCTCTCTATCAATGCCCGAAACTGGACCCTGGAAGGGAGCTGC<u>TGA</u>CTGGCCAC CATATTATTTCCAAAAATATCTTGGACAGACAAGGACCAAAATGCCAAAATCTCAGCGGACTCGATGATCTGCCT GCTGATGTTCCTTCTGTGGCTGTGTCTATTTTCAGTTCTGCTCTAACATGGCATGCCCTTTCTCAGCCCAGGAAA CAGCATGTGGTTCAGAGAAAAGAGCGACAAGGAAAAGTTAGGACTCCTGAGGTCCGAACAGGGGCTTCTGTTGCC CACTTCACAACACCCAGTGATCACCGGTGTGCAATTGCCTCCTTGGCTCTGAGGGATGTTTTGCGCTCCCTTTTC ${\tt TCATCATTGGGGTTAGCGGGTGCAGACAAATTCAGCAATAGTATGCAGATCAGCCCTCACCACCTCATTGTTCT$ CATCTGGAACTGAAACTTTCTGGATTTCTCTTGAAGTGCTACACTGCACTGAATGTAAGGAATTGTTGCTTGTGG AAGTTTCTCAGCGTTTCTGGCTGTCTTAGGGCTGGCCTCAGAACCCAGCATTCCTGTTATTTGCTTCTAAATTAG CAGCTCTCTTTTTTTTTTTTTTTTTGAGGCAGTCTCACTCTGTCACCCAGGCTGGAGTGCAGTGGCGTGATCTCG ${\tt GCCCACTGCAACCTCTGCGTTCAAGCAATTTTCCTGCCTCAGCCTCCCGAGTAGCTGGGAGTACAGGC}$ ACACACCACCACCCAGCTAATTTTTGTATTTTTAGTAGAGATAGGGTTTCACCGTGTCTCCCAGGCTGGTCTC AAACTCCTAACCTCAAGTGATTCGCCTGCCTCGGCCTCCCAAAGTGCTGGGATTACAGGTGGGAGCCACTACAGC TGGCCCAGCAGCTCTGTTTCTGATAGAGGTGGTTGGGGCTCTCATCCCTAGATCCTAACCCTTTAGTATGCTGGA ATTCTACTCTCACTTCACTGCATTGACTGTTGTTGATTAGTTATTATTGCAAAGCACTGCCACCGGCCTCAGGGA GTTTATGTGTAATAGAATTAAAAATAATAGCTGTGTATAACACTTAGCTCAAGCCACGCATGTGTGAGGCATTTG GTATGTATCTGAATTAATTCTCACTAAAATTCAGCAAAGGACTTGATAGCCTCTCCCCGCCTTTTCAATAAAGGA TGAATGAAGGTTG

1149/2682 FIGURE 1037

 ${\tt AASASSTNLIHLSSKGHISPAKDTSLQQRTPAEMSPVLHFYVRPSGHEGAASGHTRKLQGKLPELQGVETELCY}$ NVNWTAEALPSAEETKKLMWLFGCPLLLDDVARESWLLPGSNDLLLEVGPRLNFSTPTSTNIVSVCRATGLGPVD RVETTRRYRLSFAHPPSAEVEAIALATLHDRMTEQHFPHPIQSFSPESMPEPLNGPINILGEGRLALEKANQELG $\verb|LALDSWDLDFYTKRFQELQRNPSTVEAFDLAQSNSEHSRHWFFKGQLHVDGQKLVHSLFESIMSTQESSNPNNVL|$ ${\tt KFCDNSSAIQGKEVRFLRPEDPTRPSRFQQQQGLRHVVFTAETHNFPTGVCPFSGATTGTGGRIRDVQCTGRGAH}$ ${\tt VVAGTAGYCFGNLHIPGYNLPWEDLSFQYPGNFARPLEVAIEASNGASDYGNKFGEPVLAGFARSLGLQLPDGQR}$ REWIKPIMFSGGIGSMEADHISKEAPEPGMEVVKVGGPVYRIGVGGGAASSVQVQGDNTSDLDFGAVQRGDPEME QKMNRVIRACVEAPKGNPICSLHDQGAGGNGNVLKELSDPAGAIIYTSRFQLGDPTLNALEIWGAEYQESNALLL RSPNRDFLTHVSARERCPACFVGTITGDRRIVLVDDRECPVRRNGQGDAPPTPPPTPVDLELEWVLGKMPRKEFF LQRKPPMLQPLALPPGLSVHQALERVLRLPAVASKRYLTNKVDRSVGGLVAQQQCVGPLQTPLADVAVVALSHEE LIGAATALGEQPVKSLLDPKVAARLAVAEALTNLVFALVTDLRDVKCSGNWMWAAKLPGEGAALADACEAMVAVM AALGVAVDGGKDSLSMAARVGTETVRAPGSLVISAYAVCPDITATVTPDLKHPEGRGHLLYVALSPGQHRLGGTA LAQCFSQLGEHPPDLDLPENLVRAFSITQGLLKDRLLCSGHDVSDGGLVTCLLEMAFAGNCGLQVDVPVPRVDVL SVLFAEEPGLVLEVQEPDLAQVLKRYRDAGLHCLELGHTGEAGPHAMVRVSVNGAVVLEEPVGELRALWEETSFQ LDRLQAEPRCVAEEERGLRERMGPSYCLPPTFPKASVPREPGGPSPRVAILREEGSNGDREMADAFHLAGFEVWD VTMODLCSGAIGLDTFRGVAFVGGFSYADVLGSAKGWAAAVTFHPRAGAELRRFRKRPDTFSLGVCNGCQLLALL GWVGGDPNEDAAEMGPDSQPARPGLLLRHNLSGRYESRWASVRVGPGPALMLRGMEGAVLPVWSAHGEGYVAFSS PELQAQIEARGLAPLHWADDDGNPTEQYPLNPNGSPGGVAGICSCDGRHLAVMPHPERAVRPWQWAWRPPPFDTL TTSPWLQLSINARNWTLEGSC

1150/2682 FIGURE 1038A

CCGCGCGCGCGCCGAGGCGGCGGCGGGGACGCGGGGACGCGAGGACGCGGCTTTGTGCAGGCGGGTCGCGG GCGCCCATGGCGGAGTGCGGCGGGGGGGGCGCCGCGGGGCCCTGCCCACCTCCCGGGCCCGGCCCTCGGC TATGACAGCGGCGGGTTTCCAACGGAGACTGCAGCCTCGGCGTGTCCGGGGACGAAGCCCGGGCTAGCCCTACC AGGGGACCCCGCGGCGTTGCGCTCGCCCCGACCCCCAGCGCGGTCGTCTGTACCCTCCCCGGGAGAGCAAGCCG GGCGGCCTGCCCGCGGAGCAGCATCATCAAGGATGGTACAAAACAGAAGAGGGAACGGAAAAAGACAGTCTCA TTCAGCAGCATGCCAACAGAGAAGAAGATCAGCAGTGCAAGTGATTGTATTAATTCAATGGTTGAGGGTTCAGAA CTCAAAAAGGTTCGCTCCAACTCTAGAATTTATCATAGGTACTTTTTACTGGATGCTGACATGCAGAGCCTAAGG TGGGAGCCATCTAAGAAGGATTCTGAGAAAGCCAAGATTGACATTAAATCCATCAAGGAAGTGAGAACAGGAAAA AACACAGACATATTCCGCAGCAATGGCATTTCTGACCAGATATCTGAAGATTGTGCGTTTTTCCGTCATATATGGA GAGAATTATGAGTCACTGGATTTGGTTGCCAACTCCGCAGATGTTGCAAACATCTGGGTTACAGGACTGCGGTAC CTAATTTCTTATGGAAAACATACACTTGATATGTTAGAAAGTAGCCAAGATAACATGAGGACTTCTTGGGTTTCA CAAATGTTTAGTGAAATTGATGTAGATAACCTTGGACATATAACTCTGTGTAATGCTGTGCAATGTATCAGAAAC CTCAATCCTGGTTTAAAAACGAGCAAAATTGAGCTTAAGTTCAAAGAATTGCATAAATCAAAGGACAAAGCTGGT GTTCAGTTTTCAAGCAATAAAGAATTCCTTGATACCAAGGACCTTATGATGTTTCTTGAGGCAGAACAGGGTGTG GCACATATAAATGAGGAAATAAGCCTTGAAATTATTCACAAATATGAACCATCCAAAGAGGGTCAGGAAAAGGGC TGGCTCTCCATAGACGGGTTCACTAATTACCTTATGTCACCTGACTGTTATATATTCGATCCAGAACATAAGAAG CAGTTCCGAGGTCCCTCCGACATCACAGGATATATTCGAGCTCTTAAAATGGGTTGCCGGAGTGTTGAATTAGAT GTATGGGATGGCCGGACAATGAACCTGTAATTTACACAGGCCACACCATGACCTCTCAGATAGTTTTCCGCAGT GTCATTGATATTATCAAGTATGCATTCTTTGCTTCAGAGTATCCTCTTATCTTGTGTTTAGAAAACCACTGT TCCATTAAACAACAGAAGGTAATGGTTCAGCACATGAAGAAACTTTTAGGAGACAAGCTCTATACAACATCACCC AATGTTGAGGAATCTTATCTACCATCCCCAGATGTCCTGAAAGGGAAAATACTAATTAAAGCAAAGAAGCTGTCC TCAAATTGCTCTGGGGTAGAAGGAGATGTTACTGACGAAGATGAAGGAGCAGAAATGTCTCAGAGGATGGGAAAA GAGAACATGGAGCAACCCAATAATGTGCCTGTGAAGCGATTTCAGCTTTGTAAAGAACTGTCTGAACTGGTCAGC ATCTGCAAATCAGTTCAGGTTCAAAGAATTTCAGGTGTCGTTTCAGGTTCAGAAGTACTGGGAAGTCTGTTCCTTT AATGAAGTGCTTGCCAGCAAGTACGCCAATGAAAATCCAGGGGACTTTGTAAATTACAACAAACGTTTTCTTGCT AGGGTTTTTCCCAGTCCAATGAGAATTGATTCCAGTAACATGAATCCTCAAGATTTTTGGAAATGTGGTTGCCAA ATTGTAGCCATGAACTTTCAGACACCAGGACTGATGATGGACCTGAATATTGGCTGGTTTAGGCAGAACGGAAAC TGTGGCTATGTCCTCCGGCCAGCCATCATGAGGGAGGAGGTCTCCTTCTTCAGCGCCAATACAAAAGACTCTGTC CCAGGGGTCTCACCTCAACTTCTTCACATTAAAATCATCAGTGGGCAGAACTTTCCCAAGCCCAAAGGATCAGGT GCCAAAGGTGATGTGGTAGATCCTTATGTCTATGTTGAAATCCATGGAATCCCTGCTGATTGTGCAGAACAAAGG CTGGCCATGGTGCGCTTTGTAGTGCTGGATGATGACTACATTGGGGATGAATTCATCGGCCAGTACACAATTCCC TTTGAATGTTTACAGACGGGCTACCGCCATGTCCCCCTGCAGTCCTTAACTGGAGAGGTCCTTGCACATGCTTCT TTATTTGTCCACGTGGCTATTACTAACCGAAGAGGAGGAGGAAAGCCTCATAAAAGGGGCCTTTCTGTGAGAAAA GGGAAGAAATCCAGGGAATATGCATCTTTGAGAACACTGTGGATTAAAACCGTGGATGAGGTATTCAAGAATGCC CAGCCCCTATACGGGATGCCACAGATCTGAGAGAAAACATGCAGAATGCGGTGGTGTCATTCAAGGAGCTGTGT GGCCTCTCCTCTGTGGCCAATCTCATGCAGTGCATGTTGGCGGTGTCTCCCCGCTTTCTGGGGCCCGATAACACA CCCCTAGTGGTCCTAAATCTCAGCGAGCAGTACCCCACAATGGAGCTGCAGGGAATTGTGCCGGAGGTTCTGAAG AAGGAAAGAAACTACAAAAAGCAGTGGAGAGCTTTACCTGGAATATTACCATCTTAAAGGGACAAGCAGATCTT TTGAAATATGCTAAGAATGAGACATTGGAGAACCTGAAACAAATCCATTTTGCTGCTGTTTCATGTGGACTGAAT AAACCAGGCACCGAAAATGCTGATGTCCAGAAGCCACGCCGGAGCTTGGAAGTCATACCCGAAAAAGCAAACGAT GAAACTGGAGAA**TGA**GGAAACTTACAATAAACCATTATGGAGTTTATAACTCTAGGACCAATTGTAGTCAGATGG GACATTTGCTTTGCACTCACTAATGAGAATAATATTCGGGATTTTAAAGCACAACTGGAATAGCTAATTACAGTC

FIGURE 1038B

1152/2682 FIGURE 1039

PRAAARGGGGDAGTRGRGFVQAGRGAPMAECGRGGAAGGALPTSPGPALGAKGALKAGVGEGGGGGGRLGHGRAR YDSGGVSNGDCSLGVSGDEARASPTRGPRGVALAPTPSAVVCTLPRESKPGGLPRRSSIIKDGTKQKRERKKTVS FSSMPTEKKISSASDCINSMVEGSELKKVRSNSRIYHRYFLLDADMQSLRWEPSKKDSEKAKIDIKSIKEVRTGK NTDIFRSNGISDQISEDCAFSVIYGENYESLDLVANSADVANIWVTGLRYLISYGKHTLDMLESSQDNMRTSWVS QMFSEIDVDNLGHITLCNAVQCIRNLNPGLKTSKIELKFKELHKSKDKAGTEVTKEEFIEVFHELCTRPEIYFLL VQFSSNKEFLDTKDLMMFLEAEQGVAHINEEISLEIIHKYEPSKEGQEKGWLSIDGFTNYLMSPDCYIFDPEHKK VCQDMKQPLSHYFINSSHNTYLIEDQFRGPSDITGYIRALKMGCRSVELDVWDGPDNEPVIYTGHTMTSQIVFRS VIDIINKYAFFASEYPLILCLENHCSIKQQKVMVQHMKKLLGDKLYTTSPNVEESYLPSPDVLKGKILIKAKKLS SNCSGVEGDVTDEDEGAEMSORMGKENMEOPNNVPVKRFQLCKELSELVSICKSVOFKEFQVSFQVOKYWEVCSF NEVLASKYANENPGDFVNYNKRFLARVFPSPMRIDSSNMNPQDFWKCGCQIVAMNFQTPGLMMDLNIGWFRQNGN CGYVLRPAIMREEVSFFSANTKDSVPGVSPQLLHIKIISGQNFPKPKGSGAKGDVVDPYVYVEIHGIPADCAEQR TKTVHONGDAPIFDESFEFQINLPELAMVRFVVLDDDYIGDEFIGQYTIPFECLQTGYRHVPLQSLTGEVLAHAS LFVHVAITNRRGGGKPHKRGLSVRKGKKSREYASLRTLWIKTVDEVFKNAQPPIRDATDLRENMQNAVVSFKELC GLSSVANLMQCMLAVSPRFLGPDNTPLVVLNLSEQYPTMELQGIVPEVLKKIVTTYDMMIQSLKALIENADAVYE KIVHCOKAAMEFHEHLHSIGTKEGLKERKLQKAVESFTWNITILKGQADLLKYAKNETLENLKQIHFAAVSCGLN KPGTENADVQKPRRSLEVIPEKANDETGE

1153/2682 FIGURE 1040

1154/2682 FIGURE 1041

 ${\tt MADIQTERAYQKQPTIFQNKKRVLLGETGKEKLPRYYKNIGLGFKTPKEAIEGTYIDKKCPFTGNVSIRGRILSG} \\ {\tt VVTKMKMQRTIVIRRDYLHYIRKYNRFEKRHKNMSVHLSPCFRDVQIGDIVTVGECRPLSKTVRFNVLKVTKAAG} \\ {\tt TKKQFQKF} \\$

FIGURE 1042A

GCCACCGCAGGGCTGCTCCAAGTGAGAATCGTGAGGGTGGCCAAGTCCAGTTTGGACCTCTGACCCTTGGGCAGC ACCTCCCGACAGCCGGCTCGGGACCCAACTCTGCGAGCCAGGTGAAAATGAGTTCTTCAGTAAGAAAAAGGCA AGCCAGGCAAAGGAGGTGGAAAAGGGTCTTCTAGAGGAGGAGGAGGAGGAGGAGTCACGCCAGTAAATCTCATG GGAGTGGTGGCGGTGGTGGTGGTGGTGGTGGAGGTGGCGCAACAGAAAGGCCTCCAGTAGAATATGGGATG ATGGAGATGACTTTTGTATCTTCAGTGAATCAAGGCGCCCTTCCAGACCTAGCAACAGTAACATAAGCAAAGGAG AGTCACGCCCAAAATGGAAACCCAAAGCCAAAGTACCCCTTCAGACTCTACATATGACTTCTGAGAATCAAGAGA AAGTGAAAGCTCTTCTCCGAGACCTGCAAGAACAAGATGCTGATGCTGGATCTGAAAGAGGCCTTTCTGGGGAGG AGGAAGATGATGAGCCTGATTGCTGTAACGATGAGCGGTACTGGCCAGCTGGACAGGAACCTTCCCTCGTTCCCG ACTTGGATCCTTTGGAATATGCTGGCTTAGCCTCAGTGGAGCCTTATGTTCCAGAATTTACAGTCTCCCCATTTG CAGTGCAAAAACTTTCCAGGTATGGTTTCAATACTGAACGCTGTCAAGCGGTCCTGAGGATGTGATGGAGATG TGGGAGCATCACTAGAGCATCTCCTTACCCAGTGTTTTTCAGAGACATTTGGAGAGAGGATGAAGATCTCTGAGG CAGTCAACCAGATAAGCTTGGATGAGTGTATGGAACAGCGACAGGAAGAGGCATTTGCTCTAAGTCCATCTGTG GAGAAAAATTTATAGAAAGAATTCAGAACAGAGTCTGGACCATTGGGTTAGAACTGGAGTATCTGACAAGTAGAT TCCGCAAATCCAAGCCAAAAGAAAGTACCAAAAATGTACAAGAGAATTCACTTGAAATCTGTAAATTTTACCTCA AAGGAAATTGTAAATTTGGATCAAAATGCAGATTCAAACATGAAGTGCCCCCAAATCAAATTGTTGGAAGAATAG TGTCGTTTACATATTTCTGAGTTTCTTTATGACAAGGCCTTGACATTTGCGGAAACTTCGGAACCTGTCGTATAT TCTTTGATAACCCTTTTAGAGGAAGAGTCGGAAATAGTCAAGTTACTAACGAATACCCACCACAAGTATAGTGAC AATAATTCTTTTGTTTCTAATCAAATTCCAGAAGTTGAAAAAGCATCAGAATCTGAGGAGTCAGATGAGGATGAC GGTCCTGCACCTGTTATAGTAGAGAATGAAAGCTATGTGAACCTTAAGAAAAAGATTTCCAAAAGATATGACTGG CAGGCAAAGTCAGTACATGCTGAAAATGGTAAAATCTGCAAGCAGTTCCGAATGAAACAGGCTTCCAGACAGTTC CACCAGGTGGTTGTCATAAGTGGTATGACTGGATGTGGGAAAACCACAAATTCCGCAGTTTATTCTGGATGAT TCTCTGAGTGGACCACCTGAGAAGGTAGCCAACATCATCTGTACCCAACCCCGACGAATCTCTGCAATCTCTGTT GCTGAACGCGTTGCTAAAGAAAGAGCAGAGAGGGTGGGTCTGACCGTGGGATACCAGATTCGGTTAGAAAGTGTC AAGTCCTCAGCCACCAGACTGTTATACTGCACCACGGGAGTGCTGCTGAGAAGGCTAGAAGGAGATACAGCTCTA CAAGGAGTTTCCCATATCATTGTTGATGAAGTTCATGAGAGGACAGAAGAAAGTGACTTCTTGCTGCTAGTTTTG AAGGACATTGTATCGCAGAGGCCAGGTCTTCAAGTTATTTTAATGAGTGCAACTCTAAACGCTGAGCTTTTTTCA GCAATTGCTGTGACAAGGTATGTATTACAGGATGGGAGCCCATATATGCGGTCCATGAAACAGATTTCAAAGGAA AAGCTTAAAGCAAGGCGGAACAGAACTGCATTTGAAGAAGTGGAAGAAGACCTAAGGCTCTCCCTTCACCTCCAG GATCAGGATTCTGTCAAAGATGCAGTGCCAGATCAACAGTTAGATTTTAAGCAGCTCCTGGCCCGCTATAAAGGG GTTAGCAAGTCAGTCATCAAAACAATGTCCATCATGGATTTTGAAAAGGTGAATCTTGAATTAATAGAGGCCTTA TTAGAGTGGATTGTGGATGGAAAGCACTCCTACCCTCCAGGTGCTATACTTGTATTTTTACCAGGACTAGCAGAA ATCAAAATGCTTTATGAACAGCTACAGTCTAATTCTCTTTTCAACAACAGACGTAGTAATCGATGTGTTATTCAC CCACTTCATTCATCTTTATCCAGTGAAGAGCAGCAGCTGTGTTTGTAAAACCTCCTGCAGGAGTAACTAAGATT ATAATTTCCACCAACATTGCTGAGACATCCATAACCATCGATGATGTTGTCTATGTTATCGATTCTGGGAAAATG AAAGAAAAGAGATATGATGCCAGCAAAGGGATGGAAAGTCTAGAGGACACCTTTGTATCTCAAGCTAATGCTCTA CAAAGGAAAGGCCGAGCAGGCCGTGTTGCATCTGGGGTCTGCTTCCATTTATTCACTAGCCATCACTACAATCAC CAGCTTTTAAAACAACAGCTACCAGAAATACAAAGAGTGCCATTGGAACAGCTGTGTCTAAGAATTAAAATTTTA GCCTCAAAAATACGATTACGAGACTTAGGAGCATTAACTCCAGATGAAAGATTGACCCCTCTTGGGTATCATTTG GCCTCTCTGCCCGTGGATGTGAGAATTGGCAAACTAATGTTGTTTGGGTCTATCTTCCGCTGTTTGGATCCTGCT CTCACCATTGCTGCCAGTTTGGCTTTTAAGTCTCCGTTTGTATCTCCCTGGGATAAAAAAGAAGAAGCTAACCAG **AAAAAGCTGGAATTTGCATTCGCAAACAGTGATTATCTGGCCCTTCTACAAGCGTATAAGGGATGGCAGCTAAGT** ACAAAAGAAGGCGTGCGTGCAAGTTATAATTACTGCAGACAAAACTTCTTGTCTGGAAGAGTTCTGCAGGAAAATG

1156/2682 FIGURE 1042B

GCCAGCCTCAAACGACAATTCACGGAACTGTTATCGGATATAGGGTTTGCAAGGGAAGGGCTCAGAGCAAGGGAA ATTGAGAAAAGGGCCCAAGGAGAGATGGTGTCTTAGATGCCACAGGAGAAGAGGCAAACTCAAATGCTGAGAAC CCCAAGCTGATATCAGCAATGCTGTGTGCTGCTTTGTATCCAAATGTAGTGCAGGTGAAAAGCCCAGAAGGAAAA TTTCAGAAGACCAGTACTGGAGCTGTCAGAATGCAACCAAAATCAGCTGAGTTGAAGTTTGTCACCAAGAACGAT GGATATGTACACATTCACCCTTCATCAGTGAACTATCAGGTGAGACACTTTGACAGCCCCTACCTGTTGTACCAC GAGAAGATAAAACTAGTCGAGTATTCATCCGAGACTGCAGCATGGTGTCTGTGTACCCGCTGGTCTTGTTTGGA GGAGGCCAAGTGAATGTGCAGCTTCAAAGAGGAGAGTTCGTTGTCTCCCTGGATGATGGTTGGATCCGTTTTGTA GCTGCTTCCCATCAGGTGGCTGAACTGGTAAAGGAGCTTCGTTGTGAACTTGATCAGCTTCTCCAGGATAAAATT AAAAACCCAAGCATTGATCTGTGTACGTGTCCTCGAGGATCCCGGATCATCAGCACAATTGTGAAACTTGTCACC ACACAA**TAA**AAAGCAGTCTTAGAGAGTGCTTGCTACTCACCTGCTTCTAGCTCACCTGGGAAATAACAGCAGAAC CTCTACCTCGAACTAAAGACCTATTGGGGCTGGCCCTGGTGGAGGCCCAGGGCATGAAGCCCAAGGCAGCTGA GGCAGTGTATATACCCTTAGGGCCATTTCTAACAAAGCCTTGGCCACTCCCAGCACAATTTGGAGTGTCAAGGGT GAGAGCCTAAAACCCAGCTTGCCTGTCTTTGTCTCTGTGATTGTTCTGGAGTGAATTAAGTTCACCTGATAACTC AAAAGTGAATGTATAATACAATTCTGTTTTAATCTGTGTATTCTTTTTCTCCTACTTTTTACTGGGGTGAGAGGG GCATGAAGAGAAATACGCCTTTTTTTTTTTTTTTCTTTTCCTGTCGCCAAGGCTCGACTGAGAAGAGTCAGAACAGAGA AGGGGAAAAAAACCCAAAATTATGTGAACAAGCAAAATTAAAATTTCATTTTAGGCTATTGGCTACTGAGTAAA CTTGACTTGTGAGGGGTTTTTATTTTTACTCATTAAAAGTCAACTTAAACCAAAAAAATCTATGTCGGGTGCGGA GAAAGAGGTAATGAAATGGCAGGAATTCGATATCAGCTTATC





FIGURE 1043

HRRAAP SENREGGQVQFGPLTLGQHLPTAGSGPNSASQVKMSSSVRRKGKPGKGGGKGSSRGGRGGRSHASKSHG SGGGGGGGGGGGGRKASSRIWDDGDDFCIFSESRRPSRPSNSNISKGESRPKWKPKAKVPLOTLHMTSENOEK VKALLRDLQEQDADAGSERGLSGEEEDDEPDCCNDERYWPAGQEPSLVPDLDPLEYAGLASVEPYVPEFTVSPFA VQKLSRYGFNTERCQAVLRMCDGDVGASLEHLLTQCFSETFGERMKISEAVNQISLDECMEQRQEEAFALKSICG EKFIERIONRVWTIGLELEYLTSRFRKSKPKESTKNVQENSLEICKFYLKGNCKFGSKCRFKHEVPPNQIVGRIE RSVDMILILMLLKMHLFLYELEIRFSKDHKYPYQAPLVAFYSTNENLPLACRLHISEFLYDKALTFAETSEPVVY SLITLLEEESEIVKLLTNTHHKYSDPPVNFLPVPSRTRINNPACHKTVIPNNSFVSNQIPEVEKASESEESDEDD GPAPVIVENESYVNLKKKISKRYDWQAKSVHAENGKICKQFRMKQASRQFQSILQERQSLPAWEERETILNLLRK HQVVVISGMTGCGKTTQIPQFILDDSLSGPPEKVANIICTQPRRISAISVAERVAKERAERVGLTVGYQIRLESV KSSATRLLYCTTGVLLRRLEGDTALQGVSHIIVDEVHERTEESDFLLLVLKDIVSQRPGLQVILMSATLNAELFS DYFNSCPVITIPGRTFPVDQFFLEDAIAVTRYVLQDGSPYMRSMKQISKEKLKARRNRTAFEEVEEDLRLSLHLQ DQDSVKDAVPDQQLDFKQLLARYKGVSKSVIKTMSIMDFEKVNLELIEALLEWIVDGKHSYPPGAILVFLPGLAE IKMLYEQLQSNSLFNNRRSNRCVIHPLHSSLSSEEQQAVFVKPPAGVTKIIISTNIAETSITIDDVVYVIDSGKM KEKRYDASKGMESLEDTFVSQANALQRKGRAGRVASGVCFHLFTSHHYNHQLLKQQLPEIQRVPLEQLCLRIKIL EMFSAHNLQSVFSRLIEPPHTDSLRASKIRLRDLGALTPDERLTPLGYHLASLPVDVRIGKLMLFGSIFRCLDPA LTIAASLAFKSPFVSPWDKKEEANQKKLEFAFANSDYLALLQAYKGWQLSTKEGVRASYNYCRQNFLSGRVLQEM ASLKRQFTELLSDIGFAREGLRAREIEKRAQGGDGVLDATGEEANSNAENPKLISAMLCAALYPNVVQVKSPEGK FQKTSTGAVRMQPKSAELKFVTKNDGYVHIHPSSVNYQVRHFDSPYLLYHEKIKTSRVFIRDCSMVSVYPLVLFG GGQVNVQLQRGEFVVSLDDGWIRFVAASHQVAELVKELRCELDQLLQDKIKNPSIDLCTCPRGSRIISTIVKLVT TQ

FIGURE 1044A

GCGTGACCCTCGCCTGATCCAGTTGTTAGAGTTGGAAGCTTGGCAGTTGGCCTCCCTTCTTCCCATGGAGGACGG GGGCTTAACAGCCTTTGAAGAGGACCAGAGATGCCTTTCCCAGAGCCTCCCCTTGCCAGTGTCAGCAGAGGGCCC AGCTGCACAGACCACTGCTGAGCCCAGCAGGTCGTTTTCCTCAGCCCACAGACACCTGAGCAGAAGGAATGGGCT TTCCAGACTCTGCCAGAGCAGGACAGCGCTCTCTGAAGACAGATGGAGCTCCTATTGTCTATCATCACTGGCTGC CCAGAATATTTGTACAAGTAAACTGCACTGCCCTGCTGCCCCTGAGCACACGGACCCGTCCGAACCGCGGGGCAG TGTGTCCTGCTGCTGCGGGGGACTGTCCTCAGGGTGGTCCTCACCTCTGCTTCCGGCCCCTGTGTGCAA CCCTAACAAGGCCATCTTCACGGTGGATGCCAAGACCACAGAGATCCTCGTTGCTAACGACAAAGCTTGCGGGCT GGAGGCCCTCAGCGAGGAGCACATGGAGGCCGACGGCCACGCTGCGGTGGTGTTTGGCACGGTGGTGGACATCAT CACCCGTAGTGGGGAGAAGATTCCAGTGTCTGTGTGGATGAAGAGGATGCGGCAGGAGCGCCGCCTATGCTGCGT GGTGGTCCTGGAGCCCGTGGAGAGGGTCTCGACCTGGGTCGCTTTCCAGAGCGATGGCACCGTCACGTCATGTGA TTCTGTGCAGCTCCCTCCTTCTGGCCAGCACATCCCAAAGAATCTCAAGATTCAGAGGTCTGTTGGAAGAGCCAG GGACGGTACCACCTTCCCTCTGAGCTTAAAGCTGAAATCCCAACCCAGCGAGGAGGAGGCGACCACCGGTGAGGC GGCCCCTGTGAGCGGCTACCGGGCATCTGTCTGGGTGTTCTGCACCATCAGTGGCCTCATCACCCTCCTGCCGGA TGGGACCATCCACGGCATCAACCACAGCTTCGCGCTGACACTGTTTGGTTACGGAAAGACGGAGCTCCTGGGCAA GAATATCACTTTCCTGATTCCTGGTTTCTACAGCTACATGGACCTTGCGTACAACAGCTCATTACAGCTCCCAGA CCTGGCCAGCTGCCTGGACGTCGGCAATGAGAGTGGGTGTGGGGAGAGAACCTTGGACCCGTGGCAGGGCCAGGA CCGGAAGCTGATGGAAAGCCAAGACATCTTCACCGGGACTCAGACTGAGCTGATTGCTGGAGGCCAGCTCCTTTC GCTGCCCAAGGACCAGCAAATCACTGCCTTGGGGAGAGAGGAACCTGTGGCAATAGAGAGCCCCGGACAGGATCT TCTGGGAGAAGCAGGTCTGAACCAGTGGATGTGAAGCCATTTGCTTCCTGCGAAGATTCTGAAGCTCCAGTCCC AGCTGAGGATGGGGGCAGTGATGCTGGCATGTGTGCCCTGTGTCAGAAGGCCCAGCTAGAGGCGGATGGGAGTCAG TGGTCCCAGCGGTTCAGACCTTTGGGCTGGGGCTGCCGTGGCCAAGCCCCAGGCCAAGGGTCAGCTGGCGGGGGG CAGCCTCCTGATGCACTGCCCTTGCTATGGGAGTGAATGGGGCTTGTGGTGGCGAAGGCAGGACTTGGCCCCCAG CCCCTCTGGGATGGCAGGCCTCTCGTTTGGGACACCTACTCTAGATGAGCCGTGGCTGGGAGTGGAAAACGACCG AGAAGAGCTGCAGACCTGCTTGATTAAGGAGCAGCTGTCCCAGTTGAGCCTTGCGGGAGCCCTGGATGTCCCCCA CGCCGAACTCGTTCCGACAGAGTGCCAGGCTGTCACCGCTCCTATGTCCTCCTGCGATCTGGGAGGCAGAGACCT GTGCGGTGGCTGCACGGCCAGCTCCTCAGCCTGCTATGCCTTGGCCACGGACCTCCCTGGGGGCCTGGAAGCAGT **AACGTCATCAAATTGTTCCTGTGCTACGTCTGAACTCAGAGAGACACCCTCTTCCTTGGCAGTGGGCTCCGATCC** AGATGTAGGCAGTCTCCAGGAACAGGGGTCGTGTGTCCTGGATGACAGGGAGCTGTTACTACTGACCGGCACCTG TGTTGACCTTGGCCAAGGCCGACGGTTCCGGGAGAGCTGTGTGGGACATGATCCAACAGAACCGCTTGAGGTTTG $\tt CCCTGAGGACACGTGCCCATCAGCAGAGGAGCCAAGGCTGAACGTCCAGGTCACCTCCACGCCCGTGATCGTGAT$ ${\tt GCGCGGGGCTGCTGCCTGCAGCGGGAGATCCAGGAGGGTGCCTACTCCGGGAGCTGCTACCATCGAGACGGCTT}$ GAAAGACCTCCTCCACAGCCAACGCGACTCAGCCGCCAGGACCCGCCTGTTCCTTGCCAGCCTGCCCGGCTCCAC CCCCAAGGCTGTGGAACTGGAGGGGTTGGCGGCCTGTGAGGGCGAGTACTCCCAAAAGTACAGTACCATGAGCCC GCTGGGCAGTGGGGCCTTCGGCTTCGTGTGGACTGCTGTGGACAAGAAAAAAACAAGGAGGTGGTGGTGAAGTT TATTAAGAAGGAGAGGTCTTGGAGGATTGTTGGATTGAGGATCCCAAACTTGGGAAAGTTACTTTAGAGATCGC AATTCTATCCAGGGTGGAGCACGCCAATATCATCAAGGTATTGGATATATTTGAAAACCAAGGGTTCTTCCAGCT TGTGATGGAGAAGCACGGCTCCGGCCTAGACCTCTTCGCTTTCATCGACCGCCACCCCAGGCTGGATGAGCCCCT GGCGAGCTACATCTTCCGACAAGTGAGAGCCAGAGCCGTCTAGTGTCAGCAGTGGGATACCTGCGCTTGAA GGACATCATCCACCGTGACATCAAGGATGAGAACATCGTGATCGCTGAGGACTTCACAATCAAGCTGATAGACTT TGGCTCGCCGCCTACTTGGAAAGGGGAAAATTATTTTATACTTTTTGTGGGACCATCGAGTACTGTGCACCGGA

1159/2682 FIGURE 1044B

AGTTCTCATGGGGAATCCCTACAGAGGGCCGGAGCTGGAGATGTGGTCTCTGGGAGTCACTCTGTACACGCTGGT
CTTTGAGGAGAACCCCTTCTGTGAGCTGGAGGAGACCGTGGAGGCTGCCATACACCCGCCATACCTGGTGTCCAA
AGAACTCATGAGCCTTGTGTCTGGGCTGCTGCAGCCAGTCCCTGAGAGACCCACCACCTTGGAGAAGCTGGTGAC
AGACCCGTGGGTAACACAGCCTGTGAATCTTGCTGACTATACATGGGAAGAGGTGTGTCGAGTAAACAAGCCAGA
AAGTGGAGTTCTGTCCGCTGCGAGCCTGGAGATGGGGAACAGGAGCCTGAGTGATGTGGCCCAGGCTCAGGAGCT
TTGTGGGGGGCCCCGTTCCAGGCGAGGCTCCTAATGGCCAAGGCTGTTTGCATCCCGGGGATCCCCGTCTGCTGAC
CAGCTAAACACCAATTTTTTCCTGCTTTTCTCCACTTGGTTTGGAAAATCACACAGTTTTCAGGCTCCATCTGTT
TGGAGAAAATACATCTGAAGCATCCCCAATTCACCTTCTAAAAACTCATGTGCAGGTTTGATAAAACACCAGAAC
AGAAGACAGTGATGCTGTATTATTTTAGATTTATTACATAGATTTGGAATTCACTTTTTTCATGACCTAGAAAAA
AACATTCCAGTGTTCAACTGTTTTATATTATTATTAATAGGGCTTTTTAATTTTTGTG

1160/2682 FIGURE 1045

TTCATATTAAAAAAATAGCTGGTAAATCTTTCTAGGTAGTAACTTATCCAAACAATACTTTGAGTATCATATTTT GTGAATGACTTGCTTAAACTGGGAAACTGAATATTCTTTTTAAATCATATAATTCCTGTATTAAATGTGAAACAC ACAGTCTCCAAAGTCACCTGATTCTCTGTGGAAAATGAAAGGCATTGAAGGAAACCAGATACATTAATACTTAGT TTTGGTTGAAAGTGCAACATTACTGTACTTAGAAGGGGCTTGGTTTATTTTTAGATATTTAAGCTATCATTAATT TTAGACCAATGGCTAATAATAAGAGAGATTTTTGGTTGCTCATTTATGGAGAGACAAAGAACAGCATGGCATAAA CAAACATCCCAGAAATAAATGAAAAGTTTTAAGTGATAAAATTGTGTTTTCTATGAACCAGTGTTGTACATGAAC CAACATTGTGTTTCTTAGCTCTGACCTGTACAGTGAGGTACCTGTCAGGACCCCTAGTCTTGGCACTGGAAATGA TTTATGTTTGATAAACTTAAGTTCTGCTGATATCCTGTTACTGGTAATTCTGGTACCAAAATTTCAAACGGTTTG ATTATTAGTAGCATTTTGAGTACCTAGGTGCATATAATACAGTTAGCAGACCCTTACAGAGTCAAAAGAGATTTT TTCATTGAAAATCGTGGCTCTATTGCTTTATTCATGGTTTCCACAACTCTTTTTGTAACACCCTTAATTTTCTCTC CTAAATTATCCCACTATTTAGAAGTAGAAAATAAGAGAAGAGTGCTTTCAAGGAAATTTGTCATATTCTCCCTTC TATCTAGAAGTTGACAATGAATTGCAATAAAACTAAGAAATAACTGAATGCTGAAAAAATACCATGAATTAATGTT ATGGCTTCTTTATTTTTGTATATCCATTCCCACAAAATTGAATTTAAGATTATTAATGAAAATTCTATATTAAGT CATTTCTGATGTAAAACCTATATGTAAATATTGTAATTTAAATATGATTGGACAGCTGTTAAGTTTTGGGGAGGG AAGCAGATGCCAGCGTTCTCTGCTGAAAAGACAAGATGGCGCTTGACGGACCACAGCAGATGGAGCTGGAGGAGG AAAAGGCAGGCAGTGGACTCTGCCAGTATTATCTGTCCAAGATTGAAGAACTCCAGGGTCAACTGCAATATAAAT TGGATGGGGGAAAGCCACAAGGAACAGTTCTGAACTCCAGGTGCATTTGCAGCTGATTTTGAATGATAAGACCCA AAACCTCTGGAGGCGGCAGGTGCACGGGAATGAACTAAATGTTAAAGTGTGCCTATTACAGGAGGAGCTACAGCT GCTGCAGGAATAGGACTCCTGTGTCAGGGAAGTAGTCCAGGCC<u>A**TG**</u>GGTAAGAAGAAAGTGTTGGTCAAGGTGCA TCTCAAGGACAAGTTTGTCATAGATGTGGACAAAAATATCAGCATCAGTGATGTGACACCCAGTTCCTTGGTGGT TCTAAGAAATGACAGCTACACTTTGCACAAGATCCTACCCAACAAGGTGGACTCATTGGTGTCACTGATGATGGT GAAGAAAGTACCAGATTCAGCTTATGAAATGATTGGTAGACTGGATAGGCAGATCAAGAAGATCAAAGAAGTGAT AGACTGTTGGCCTGGGCTCTGGCTCATCATAGGGACTGTGTACCTTTATTCATGTCTCTGGCTCAGAAATTCATTGGGGAATTTCTGTGATGGCAGAGAAAATGCTCATCTGTCATCTTCATGGATGAAATTGACTCTT TTGGCTCCTCAGAGCTGGAGGGGATGCTGGAGGGAACAGTGAAGTGCAGCAGATGATGCTTCGAGGGTGGCTTT GAGGCCACCAAGAGTATCACGGTTTATCACGGCTGCTAATACGATTGATATCCTGGACTCGGCACTGCTTTGCCC TCAGAAATGAACCTGACCCAGGGGATCAACCTGAGAAAAATTGCTGAGCTTATGCCAGGAGCATCAGGCTGAAGT GAAGGGCATGTGCACAGAAACCGGCATGTATGCCCTGAGTAGCGAGTCCATGTCACTCAGAAGGACTTTGAGGTA GTCCAAAGTCCTATCTCATGCCAAAGGACAGTGAGGAAAAACATGTCCATCAAGAAACTATGGAATTGAGGGCAC

1161/2682 FIGURE 1046

1162/2682 FIGURE 1047

GGCGCCATTTTGCTGGAGCCTGCGACCGAGTGGGAGTGGAGTGGAGCGGCTGTGGTTGCCGACTCTTTCCTCTTC ${\tt CCCACGGTCCAGCGGGTTAATTAGGCCATCGGCCCTCGAGCCGAGACTTGTCTCTTATTTAGTTCTGGGGA}$ GCGCCTCGTCGACA<u>TGA</u>GTGATGTGGAGGAAAACAACTTCGAGGGCAGAGTGAGTACAAAGCCGCGGGAGCCGTC GCAACCTCTGGAGCCATCGCGATTGATTCCTCCCATCCCAAGATGGCTTCTGGGTTCCACTCCTTCCCCAAACAC CCGCATTGCTTCCTCCCTTCTCCCCACCCCTGAGGCTTCCTTATGTCTGCTCCGAGGTGTGGGTCCCCGTCGCGG TTGGGCGGGAGGGGGCAGGGAGCTCCCCTCCGTCCGGATAGTGGTAGGTGCTTCCTGCGGTGGCATTTCTGG GGGACTAGCTGGGGCCTGTGTCTCCTTGGCTCTCTATTTCAGTGAGCGGCCGCGTCTCTGTTGGAACCGGCGGCG TTGCGTCTAAAAAGGCGAAAGCCTTGAGGTTGAAGGTGGGACGAGCCTAATGAAGTGGTTAGTCAACGACCGCAC CGACCCTTAAGCGTTCTTAAGACGAGAGCTGTGAGGGGGAAACTACGCAAGGAGCCCTTTTCCCTTAATGTCCCTT CGACTTTCCTTTCACTTCGAAATGAATGTGGAAATGCTGTCACGCCTTATTTTTCTAATTCCTCGATGTTGGGTT TTTTCTCTTTTATATCTCAACTTTTAATGCTCTTCTTCCTATGACCTTTCATCTAAAAACTGACCACTCCTTT TATTTTTAAGATAACTAGTCAGTATATACTGTTCTGTAACTTAAAAGATGACCTGAAAATTAACAGGCCCTCTCC CATTTCTCTCTCACTCTATCCCCCACCGAAGAGGGCTCAGAAAAAAGTTTTTATTAATATATTTGGGGTCGGAG AAATACAAACATCACAAAGAATACGATATCCCCAGCTTAAATGTACTGGAACGTTTGTCAGTGAGTTTCATTTCC AAAAGCCCCATGCAACACGTTCCGGGCTGTTGTGTAGATGTTTATTCTAGTCACTAGGGGAAGCACATAAAAACA CCTGAGGTGTGTGCTGAAGGGCGAATTTTGTCCTTTTGGGGAGTTCATGATATAAACATCTAGAACCAAAAAG TCAAATCAGAAGGTCAGTTTAGGCTTTAGTTCTCTTTGAGGAAAGATTTAAAGCAATAGACTATAATAGTTACCC GAAAATTGAACCTGCTTATTTTTTAGGATGGTGTATTGATGGCCCCAACAGAACTTTCTAAAATCATGCGATAAA CATATATGATAGTAGTTGTAAAATGCTTCTTGTTTTGAAAATGTTGAGTAATTATCGATAGAAATTTTGCTGTCC ATTCATACATTCCTTCAATTAACTTTCATTGTTAAAAAATTGGGGGATTGATGTTTGGTTTGGTTTGTGGGGAGT GTAAGTTGCCGACAATTGTCACTTTTCCCTCCTAAGAAAGTAACATGTTAAGATTCCCACCTACCAGCCTGGGTG ACAGTGAGACTCCCGTCTCNNNNNNNNNNNNNNNNNNTTCCCACCCACTTTTAAGCTAAAGTATATGTAGGCA TTAAAGATTTATTTAATAGAAATAAAGGGCCCTCTTACGGCCCTTTGTGGTCATAGGAAATATTTTTTTCACAAG TGGTACCCAAGTGTATTT

1163/2682 FIGURE 1048

RHFAGACDRVGVEWSGCGCRLFPLPHGPVSGLIRPSALEPRLVSYLVLGSASST

FIGURE 1049

 $\tt CCGCCGGGAGAGCCCGGGGCAGAGCAGGGGGCCCATCAGCACTGTAGGCCCGGAAGATTGTGTGGTCCCGTTCC$ TGACCCGGCCTAAGGTCCCTGTCTTGCAGCTGGATAGCGGCAACTACCTCTTCTCCACTAGTGCAATCTGCCGAT AGCCAGCTTTGTCTGCTGCCCTGTACTATTTAGTGGTCCAAGGCAAGAAGGGGGGAAGATGTTCTTGGTTCAGTGC TAGCCGACATTGTTTTGTGGGGAGCCCTATACCCATTACTGCAAGATCCCGCCTACCTCCCTGAGGAGCTGAGTG CCCTGCACAGCTGGTTCCAGACACTGAGTACCCAGGAACCATGTCAGCGAGCTGCAGAGACTGTACTGAAACAGC AAGGTGTCCTGGCTCTCCGGCCTTACCTCCAAAAGCAGCCCCAGCCCAGCCCCGCTGAGGGAAGGGCTGTCACCA ATGAGCCTGAGGAGGAGGAGCTGGCTACCCTATCTGAGGAGGAGATTGCTATGGCTGTTACTGCTTGGGAGAAGG GCCTAGAAAGTTTGCCCCCGCTGCGGCCCCAGCAGAATCCAGTGTTGCCTGTGGCTGGAGAAAGGAATGTGCTCA TCACCAGTGCCCTCCCTTACGTCAACAATGTCCCCCACCTTGGGAACATCATTGGTTGTGTGCTCAGTGCCGATG TCTTTGCCAGGTACTCTCGCCTCCGCCAGTGGAACACCCTCTATCTGTGTGGGACAGATGAGTATGGTACAGCAA CAGAGACCAAGGCTCTGGAGGAGGGACTAACCCCCCAGGAGATCTGCGACAAGTACCACATCATCCATGCTGACA TCTACCGCTGGTTTAACATTTCGTTTGATATTTTTGGTCGCACCACCACCACAGCAGACCAAAATCACCCAGG ACATTTTCCAGCAGTTGCTGAAACGAGGTTTTGTGCTGCAAGATACTGTGGAGCAACTGCGATGTGAGCACTGTG CTCGCTTCCTGGCTGACCGCTTCGTGGAGGGCGTGTGTCCCTTCTGTGGCTATGAGGAGGCTCGGGGTGACCAGT GTGACAAGTGTGGCAAGCTCATCAATGCTGTCGAGCTTAAGAAGCCTCAGTGTAAAGTCTGCCGATCATGCCCTG TGGTGCAGTCGAGCCAGCACCTGTTTCTGGACCTGCCTAAGCTGGAGAAGCGACTGGAGGAGTGGTTGGGGAGGA CATTGCCTGGCAGTGACTGGACACCCAATGCCCAGTTTATCACCCGTTCTTGGCTTCGGGATGGCCTCAAGCCAC GCTGCATAACCCGAGACCTCAAATGGGGAACCCCTGTACCCTTAGAAGGTTTTGAAGACAAGGTATTCTATGTCT GGTTTGATGCCACTATTGGCTATCTGTCCATCACAGCCAACTACACAGACCAGTGGGAGAGATGGTGGAAGAACC CAGAGCAAGTGGACCTGTATCAGTTCATGGCCAAAGACAATGTTCCTTTCCATAGCTTAGTCTTTCCTTGCTCAG CCCTAGGAGCTGAGGATAACTATACCTTGGTCAGCCACCTCATTGCTACAGAGTACCTGAACTATGAGGATGGGA AATTCTCTAAGAGCCGCGGTGTGGGAGTGTTTGGGGACATGGCCCAGGACACGGGGATCCCTGCTGACATCTGGC ATTCTGAGCTGCTTAACAACCTGGGCAACTTCATCAACAGAGCTGGGATGTTTGTGTCTAAGTTCTTTGGGGGGCT ATGTGCCTGAGATGGTGCTCACCCCTGATGATCAGCGCCTGCTGGCCCCATGTCACCCTGGAGCTCCAGCACTATC ACCAGCTACTTGAGAAGGTTCGGATCCGGGATGCCTTGCGCAGTATCCTCACCATATCTCGACATGGCAACCAAT ATATTCAGGTGAATGAGCCCTGGAAGCGGATTAAAGGCAGTGAGGCTGACAGGCAACGGGCAGGAACAGTGACTG GCTTGGCAGTGAATATAGCTGCCTTGCTCTGTCATGCTTCAGCCTTACATGCCCACGGTTAGTGCCACAATCC AGGCCCAGCTGCAGCTCCCACCTCCAGCCTGCAGTATCCTGCTGACAAACTTCCTGTGTACCTTACCAGCAGGAC ACCAGATTGGCACAGTCAGTCCCTTGTTCCAAAAATTGGAAAATGACCAGATTGAAAAGTTTAAGGCAGCGCTTTG GAGGGGCCAGGCAAAAACGTCCCCGAAGCCAGCAGTTGTAGAGACTGTTACAACAGCCAAGCCACAGCAGATAC AAGCGCTGATGGATGAAGTGACAAAACAAGGAAACATTGTCCGAGAACTGAAAGCACAAAAGGCAGACAAGAACG AGGTTGCTGCGGAGGTGGCGAAACTCTTGGATCTAAAGAAACAGTTGGCTGTAGCTGAGGGGGAAACCCCCCTGAAG ${\tt CCCCTAAAGGCAAGAAAAAG{\color{red}}{\tt TAA}}{\tt AAGACCTTGGCTCATAGAAAGTCACTTTAATAGATAGGGACAGTAATAA$ ATAAATGTACAATCTCTATA

FIGURE 1050

MRLFVSDGVPGCLPVLAAAGRARGRAEVLISTVGPEDCVVPFLTRPKVPVLQLDSGNYLFSTSAICRYFFLLSGW
EQDDLTNQWLEWEATELQPALSAALYYLVVQGKKGEDVLGSVRRALTHIDHSLSRQNCPFLAGETESLADIVLWG
ALYPLLQDPAYLPEELSALHSWFQTLSTQEPCQRAAETVLKQQGVLALRPYLQKQPQPSPAEGRAVTNEPEEEL
ATLSEEEIAMAVTAWEKGLESLPPLRPQQNPVLPVAGERNVLITSALPYVNNVPHLGNIIGCVLSADVFARYSRL
RQWNTLYLCGTDEYGTATETKALEEGLTPQEICDKYHIIHADIYRWFNISFDIFGRTTTPQQTKITQDIFQQLLK
RGFVLQDTVEQLRCEHCARFLADRFVEGVCPFCGYEEARGDQCDKCGKLINAVELKKPQCKVCRSCPVVQSSQHL
FLDLPKLEKRLEEWLGRTLPGSDWTPNAQFITRSWLRDGLKPRCITRDLKWGTPVPLEGFEDKVFYVWFDATIGY
LSITANYTDQWERWWKNPEQVDLYQFMAKDNVPFHSLVFPCSALGAEDNYTLVSHLIATEYLNYEDGKFSKSRGV
GVFGDMAQDTGIPADIWRFYLLYIRPEGQDSAFSWTDLLLKNNSELLNNLGNFINRAGMFVSKFFGGYVPEMVLT
PDDQRLLAHVTLELQHYHQLLEKVRIRDALRSILTISRHGNQYIQVNEPWKRIKGSEADRQRAGTVTGLAVNIAA
LLSVMLQPYMPTVSATIQAQLQLPPPACSILLTNFLCTLPAGHQIGTVSPLFQKLENDQIESLRQRFGGGQAKTS
PKPAVVETVTTAKPQQIQALMDEVTKQGNIVRELKAQKADKNEVAAEVAKLLDLKKQLAVAEGKPPEAPKGKKKK

1166/2682 FIGURE 1051

GTGGAGCAGCCACCCCTGATGCCCTGGCCAAGGGGCTCTATGCCCGCCTCTTCGACTTCCTCGTGGAG GCCATCAACCGTGCTATGCAGAAACCCCAGGAAGAGTACAGCATCGGTGTGCTGGACATTTACGGCTTCGAGATC TTCCAGAAAAATGGCTTCGAGCAGTTTTGCATCAACTTCGTCAATGAGAAGCTGCAGCAAATCTTTATCGAACTT ACCCTGAAGGCCGAGCAGGAGGAGTATGTGCAGGAAGGCATCCGCTGGACTCCAATCCAGTACTTCAACAACAAG GTCGTCTGTGACCTCATCGAAAACAAGCTGAGCCCCCCAGGCATCATGAGCGTCTTGGACGACGTGTGCGCCACC ATGCACGCCACGGGGGGGGGAGCAGACCAGACACTGCTGCAGAAGCTGCAGGCGGCTGTGGGGGACCCACGAGCAT TTCAACAGCTGGAGCGCCGGCTTCGTCATCCACCACTACGCTGGCAAGGTCTCCTACGACGTCAGCGGCTTCTGC GAGAGGAACCGAGACGTTCTCTCCCGACCTCATAGAGCTGATGCAGTCCAGTGACCAGGCCTTCCTCCGGATG CTCTTCCCCGAGAAGCTGGATGGAGACAAGAAGGGGCGCCCCAGCACCGCCGGCTCCAAGATCAAGAACAAGCC AACGACCTGGTGGCCACACTGATGAGGTGCACACCCCACTACATCCGCTGCATCAAACCCAACGAGACCAAGCAC GCCCGAGACTGGGAGGAGAACAGAGTCCAGCACCAGGTGGAATACCTGGGCCTGAAGGAAAACATCAGGGTGCGC AGAGCCGGCTTCGCCTACCGCCGCCAGTTCGCCAAATTCCTGCAGAGGTATGCCATTCTGACCCCCGAGACGTGG CCGCGGTGGCGTGGGGACGAACGCCAGGGCGTCCAGCACCTGCTTCGGGCGGTCAACATGGAGCCCGACCAGTAC CAGATGGGGAGCACCAAGGTCTTTGTCAAGAACCCAGAGTCGCTTTTCCTCCTGGAGGAGGTGCGAGAGCGAAAG TTCGATGGCTTTGCCCGAACCATCCAGAAGGCCTGGCGGCGCCACGTGGCTGTCCGGAAGTACGAGGAGATGCGG GAGGAAGCTTCCAACATCCTGCTGAACAAGAAGGAGCGGAGGCGCAACAGCATCAATCGGAACTTCGTCGGGGAC TACCTGGGGCTGGAGGAGCCGGCCCGAGCTGCGTCAGTTCCTGGGCAAGAAGGAGCGGGTGGACTTCGCCGATTCG GTCACCAAGTACGACCGCCGCTTCAAGCCCATCAAGCGGGACTTGATCCTGACGCCCAAGTGTGTATGTGATT GGGCGAGAGAAGATGAAGAAGGGACCTGAGAAAGGTCCAGTGTGTGAAATCTTGAAGAAGAAATTGGACATCCAG GCTCTGCGGGGGGTCTCCCTCAGCACGCGACAGGACGACTTCTTCATCCTCCAAGAGGATGCCGCCGACAGCTTC CTGGAGAGCGTCTTCAAGACCGAGTTTGTCAGCCTTCTGTGCAAGCGCTTCGAGGAGGCGACGCGGAGGCCCCTG ACCTTCTCCCGCGGCTTCGGCGACTTGGCAGTGCTCAAGGTTGGCGGTCGGACCCTCACGGTCAGCGTGGGCGAT GGGCTGCCCAAGAACTCCAAGCCTACCGGAAAGGGATTGGCCAAGGGTAAACCTCGGAGGTCGCCAAGCCCCT TGCCCCCTGGAGAAATTCATTTGGCCCAGGGGGCACCCACAGGCCTCCCGGCCCTCCGTCCACATCCCTGGGAT GCCAGCAGACGACCCCGGGCACGTCCGCCCTCAGAGCACAACACAGAATTCCTCAACGTGCCTGACCAGGGGATG GCCGGCATGCAGAGGAAGCGCAGCGTGGGGCAACGGCCAGTGCCTGTGGGCCGACCCAAGCCCCAGCCTCGGACA CATGGTCCCAGGTGCCGGGCCCTATACCAGTACGTGGGCCAAGATGTGGACGAGCTGAGCTTCAACGTGAACGAG GTCATTGAGATCCTCATGGAAGATCCCTCGGGCTGGTGGAAGGGCCGGCTTCACGGCCAGGAGGGCCTTTTCCCA CCTGGTGGGGAGCCAGGCCCTGCCAATGAAAGCCTCGTTTACCTGGGCTGCAATAGCCTAAAAGTCCAATCCTTT GGCCTCCAGTCCTTGCCCAGGCCCTGGGTCACCAGGTCACTGGTGCAGCCCCCGCCCCTGGGCCCTGGTTTTCCT CTGCCATGTGATTAAGAAATGGGTCTTGAGTCCTGTGCTGTTGGCAAAGTTCCAGGCACAGTTGGGGAGGGGGGG CCGGAATCCGC

1167/2682 FIGURE 1052A

TCGAGACCAAAAAAAGATGACATTAACAAAAATGATGCGGAGAAACGGCGGCGGCGGGGGGGCATCGGCAGCAGT AGCAGAGGCTGTAGCATCGGACACCCTCCTCTCCCCGCAATCCGGTTCCTCTTCCCCCCTCCTTCTCACTGTTTG TTGTGTGTTTGATGTGTTAAAGCAGGAGCGAGAACCCGAGCAGCACCATGAGCAACACTACCGTCGTCCCCAGCA ATCCAGGTGACTAATGTCTCCCCGAGCGCTAGCTCTGAGCAGATGCGGACTCTCTTCGGTTTCCTAGGCAAGATC GACGAACTGCGCCTCTTCCCGCCGGATGATTCGCCTTTGCCAGTCTCATCTCGTGTCTGCTTTGTTAAGTTCCAT GATCCAGACTCAGCAGTTGTGGCACAGCATCTGACAAACACTGTATTCGTTGACAGAGCTTTGATAGTCGTACCA TATGCAGAAGGTTTGTGTTTTAACTACCTATGTGGGCATCCTAAGATGACCATCTACCTCAGTAGATGTAG AGTGAGCATTAGTAGCATGTTAAATCTAAGCTATTAACATTTTTAAACCCTTGTTATACTGCAGTCCGTAATTTT TGCTTGCAGATTTTTTTTAATTCTAAAAATTAGAAATTAGGTCTGTTATTATAAGGTATTTACCTTTTGTTTTCT TTTAAAACATTTTTAAGTTGTTTAAAACCATGTCCCTTATTGTAACTCCCTGAGATACATCTACTTAGTTAATTT GCATGATGTTATTTCTGTTTTAAATAAATGAGTAGGTTGATTTTATTTTCTTAAAGCTTCCTCACATTGATAATC TGGAAAAAAAAAAAACACATTGAATTTCAGTATACCAAGGGTTGCAGTGATTTTGGTTTTCGTGAAAGTTCAAGA TTTCCTGTAGCTTAGGTGCCAAATGGGCACTGGGTGTTTTATTTTATGCCAGATTTTCTTGTTCATTCTTGCTAT AATGCAAAACCCTTCCAGATGCCTGAAAAACAGTGGGTCCTCTGCAGCTACAGGGGATTCTAGACATTAACTAAA GGCCAGCAAGCACTCAAGTGCCCCAAGTGTTTTCCTGGTGTAACCATTTGTTAACTACATTTTCTCTCTTTTTAC ATTTTAGGCTGTTAAAGTAATTTGACAGAAAAAATGAGCAGGTTTTTTGGATCTAAAAAGCCACTGTGACAAGA AATTTTAATACCATTTTGTAAAATTTTCTAAGGCGTATTTTATAATTAGTTTGTTCCCAATGTACTGCTACTTGA TTTGCATTTTGGTAACTATAAATTTTACTCGAATCACTGAAATATGATAAAACTGCTGGATTTTAAGTTAATAAT TTAATATGCTGACCAGGATTTAAATGCTTTCCCCTTTCCTTAATAAACTGGTCAGTGGAAGTGGAATCTTAATAT TGTTCATTTTAGATGCTATCTGAAATCTTTGAAAACAAATGTGAGCATTTACACCATACCTTGTAAAAGTTGTGA AATGTCTAGTCCTTAACAGAGAAGTTGCCTCTGGTTTTCTAAAGAAATTAACTTATATTTATAAATGGGTTAAGA CATGTTATGTAATAGTACCTCTGTCTCCATGATATTAAAGTGTATGAGCCCAGTTTTAAGGTTTTGTAATGTATA GATAGATAAATTTTTGAGTTAGTGTGTTTTGGTTAAGCAATTTCTTTTATGTCAGTGTGCCTGTTGTAGGATAAG ACCATCAACAGAAATTTACAGAATTCAAATTCAGGATGAATAAAATAGAGTATAGGTCTTGGAACAAGGGTCAA ATCATGTGAGTAATATGTAAAACATTTTGGTTAGCCTGTAAATTTAAATTTTTATTGGCTAAGTATTATAGTTC CCAATCCCTGAACATAATACAGTATATCATATAAATGACTTTCATAAATATTTTCAGGCCATAGTAATTTTTCTA TTGTTGGTGAATTTAATTCTGGTATGATATGCTGTATTAATGTTACCTCCAGTAAATACAATTCCCTCCAGATTT AGCTATTACACTTCGGTGTTAGCTCTTGGTCAGTGTTTTAGAACAGTAGACATAGTCTACGGTAAGGAATAGTCT TAATTGGTAAAACTAAGATAGCTGAATTTGGAAGGAACTCTTAATAGTAATGGATTTGGGGATTTTTTAGGTTCC ATCAAAGCAGCAGTAAAAAAAATACTCTTGACGCATGAAAATTAACTGGTGAGGGGCCTCATTGCTATTTTTAAA GATCTTCTATCAGGTGTCTCACAATAAATTCAAGAGGATTTTAGTTTGCCAGAAATGTTGCAAATGCACTAATTT GTTTGTTAATATTGATGCATTACTGCCCTATATCTAAATGATCTTCTCCCCCTTCCCCTCCATAACTCTTGGTAT CTAAATTGATGACAGCTCTGACACAAGCAAGATAACAGTGCTGTGTAGTATACATTTGTTTATATTATCGGCACT TCTCAGTATAGGTGGAAGGAACCATTACCTTTATTTAACAGTGGTTTTTCTTTTTTTGTTGTTGTTTTTACAGTT CTTTTCCCTGGTTCAGCCTGAACTATATACCAGGCCCTGCTGAAAATACCACCCAACAGTTTTCTTCTGCAGCTT ATCCAGTTTCTCTTAAGTGCCCTGTACATATTGTATGTTTTATGATGAGATGCAGTTTCTTAATATGTATTACAG AAATACTACTGGTATTTGCAAATATGTAGTTTAATTGTATTATTGAACTCTCATTTTGGGGGGCTTGGGCACATTA ACAGATTAATCCATCTGTATAGGGCTTTTGCTGTTGGATAGAATTTAAATTGTCTACATAAATATTTGTTTTAGG TGGCTAAGTTAGCTTTCAACTGGCACTGTATGGCAGCATTTTTTGGTATGGTTAGCATGGCACATGGCGAAACA

1168/2682 FIGURE 1052B

1169/2682 FIGURE 1053

 ${\tt RDQKKMTLTKMMRRNGGGGAASAAVAEAVASDTLLSPAIRFLFPLLLTVCCVFDVLKQEREPEQRHEQHYRRPQHCRSGPQRRARWRXXXXXXXAPR}$

1170/2682 FIGURE 1054

 $\tt CGGAAAAAAAAAAATGGTTGAAGCAGATCGCCCAGGAAAGCTCTTCATTGGTGGGCTTAATACGGAAACAAATGAGA$ ${\tt AAGCTCTTGAAGCAGTATTTGGCAAATATGGACGAATAGTGGAAGTACTCTTGATGAAAGACCGTGAAACCAACA}$ AATCAAGAGGATTTGCTTTTGTCACCTTTGAAAGCCCAGCAGACGCTAAGGATGCAGCCAGAGACATGAATGGAA AGTCATTAGATGGAAAAGCCATCAAGGTGGAACAAGCCACCAAACCATCATTTGAAAGTGGTAGACGTGGACCGC CTCCACCTCCAAGAAGTAGAGGCCCTCCAAGAGGTCTTAGAGGTGGAAGAGGAGGAAGTGGAGGAACCAGGGGAC CTCCCTCACGGGGAGGACACATGGATGACGGTGGATATTCCATGAATTTTAACATGAGTTCTTCCAGGGGACCAC TCCCAGTAAAAAGAGGACCACCAAGAAGTGGGGGTCCTCCTAAGAGATCTGCACCTTCAGGACCAGTTC GCAGTAGCAGTGGAATGGGAGGAAGAGCTCCTGTATCACGTGGAAGAGATAGTTATGGAGGTCCACCTCGAAGGG AACCGCTGCCCTCTCGTAGAGATGTTTATTTGTCTCCAAGAGATGATGGGTATTCTACTAAAGACAGCTATTCAA GCAGAGATTACCCAAGTTCTCGTGATACTAGAGATTATGCACCACCACCACGAGATTATACTTACCGTGATTATG GTCATTCCAGTTCACGTGATGACTATCCATCAAGAGAATATAGCGATAGAGATGGATATGGTCGTGATCGTGACT ATTCAGATCATCCAAGTGGAGGTTCCTACAGAGATTCATATGAGAGTTATGGTAACTCACGTAGTGCTCCACCTA CACGAGGGCCCCCGCCATCTTATGGTGGAAGCAGTCGCTATGATGATTACAGCAGCTCACGTGACGGATATGGTG GAAGTCGAGACAGTTACTCAAGCAGCCGAAGTGATCTCTACTCAAGTGGTCGTGATCGGGTTGGCAGACAAGAAA GAGGGCTTCCCCCTTCTATGGAAAGGGGGTACCCTCCTCCACGTGATTCCTACAGCAGTTCAAGCCGCGGAGCAC TTTGGACCAAAATCCCAGTTCAAAGAAACAAAAAGTGGAAACTATTCTATCATAACTACCCAAGGACTACTAAAA GGAAAAATTGTGTTACTTTTTTTAAATTCCCTGTTAAGTTCCCCTCCATAATTTTTATGTTCTTGTGAGGAAAAA AGTAAAACATGTTTAATTTTATTTGACTTCTGCATTGCTTTTCAACAAGCAAATGTTAAATGTGTTAAGACTTGT ACTAGTGTTGTAACTTTCCAAGTAAAAGTATCCCCTAAAGGCCACTTCCTATCTGATTTTTCCCAGCAAATGAGG GCTAGCTATTAGAGGGTGGTTGGGGTATGCTACTCATAAGATTTCAGGGTGTCTTCCAACTGAAATCTCAATGTT CTCAGTACGAAAAACCTGAAATCACATGCCTATGTAAGGAAAGTGCTATTCACCCAGTAAACCCAAAAAAAGCAAA TGGATAATGCTGGCCATTTTGCCTTTCTGACATTTCCTTGGGAATCTGCAAGAACCTCCCCTTTCCCTTCCCCCA **AAAAAAAAAAAAAAAA**

1171/2682 FIGURE 1055

MVEADRPGKLFIGGLNTETNEKALEAVFGKYGRIVEVLLMKDRETNKSRGFAFVTFESPADAKDAARDMNGKSLD GKAIKVEQATKPSFESGRRGPPPPPRSRGPPRGLRGGRGGSGGTRGPPSRGGHMDDGGYSMNFNMSSSRGPLPVK RGPPPRSGGPPPKRSAPSGPVRSSSGMGGRAPVSRGRDSYGGPPRREPLPSRRDVYLSPRDDGYSTKDSYSSRDY PSSRDTRDYAPPPRDYTYRDYGHSSSRDDYPSREYSDRDGYGRDRDYSDHPSGGSYRDSYESYGNSRSAPPTRGP PPSYGGSSRYDDYSSSRDGYGGSRDSYSSSRSDLYSSGRDRVGRQERGLPPSMERGYPPPRDSYSSSSRGAPRGG GRGGSRSDRGGGRSRY

1172/2682 FIGURE 1056

ATTTTGTGGAATAGAGTTGATCGCTGTCTCCCCCCAAAGCATTTTAACTCGAATAAGCAAATGCCGCCTCTGTT TGAACGTTTTGGTATTTACAAGAGAAATCATTTTACCTAAGAGAACTAATTGAATTGGCAGCATCCTTGAAAT ACCTCCGGACAAGGATCTGGGGGTGGGGGTGGAAAAGCAACTGCGAAATAGCAGACGGAGAAATTCCTTTGGAAG TGTGTCTTATTTCTATGACAGCACAAGAAATGTGTATAGGATAATCAGTTTAGATGGCTCAAAGGCAATAATAAA TAGTACCATCACCCCAAACATGACATTTACTAAAACATCTCAGAAGTTTGGCCAGTGGGCTGATAGCCGGGCAAA CACCGTTTATGGATTGGGATTCTCCTCTGAGCATCATCTTTCGAAATTTGCAGAAAAGTTTCAGGAATTTAAAGA AGCTGCTCGACTAGCAAAGGAAAATCACAAGAGAAGATGGAACTTACCAGTACACCTTCACAGGAATCCGCAGG CGGGGATCTTCAGTCTCCTTTAACACCGGAAAGTATCAACGGGACAGATGATGAAAGAACACCTGATGTGACACA GAACTCAGAGCCAAGGGCTGAACCAACTCAGAATGCATTGCCATTTTCACATAGTTCAGCAATCAGCAAACATTG GGAGGCTGAACTGGCTACCCTCAAAGGAAATAATGCCAAACTCACTGCAGCCCTGCTGGAGTCCACTGCCAATGT GAAACAATGGAAACAGCAACTTGCTGCCTATCAAGAGGAAGCAGAACGTCTGCACAAGCGGGTGACTGAACTTGA ATGTGTTAGTAGCCAAGCAAATGCAGTACATACTCATAAGACAGAATTAAATCAGACAATACAAGAACTGGAAGA GACACTGAAACTGAAGGAAGAGGAAATAGAAAGGTTAAAACAAGAAATTGATAATGCCAGAGAACTACAAGAACA GAGGGATTCTTTGACTCAGAAACTACAGGAAGTAGAAATTCGGAACAAAGACCTGGAGGGACAACTGTCTGACTT AGAGCAACGTCTGGAGAAAAGTCAGAATGAACAAGAAGCTTTTCGCAATAACCTGAAGACACTCTTAGAAATTCT GGATGGAAAGATATTTGAACTAACAGAATTACGAGATAACTTGGCCAAGCTACTAGAATGCAGC<u>TAA</u>GGAAAGTG AAATTTCAGTGCCAATTAATTAAAAGATACACTGTCTCTCTTCATAGGACTGTTTAGGCTCTGCATCAAGATTGC **АСААААААААААААААА**

1173/2682 FIGURE 1057

MGEQPIFSTRAHVFQIDPNTKKNWVPTSKHAVTVSYFYDSTRNVYRIISLDGSKAIINSTITPNMTFTKTSQKFG QWADSRANTVYGLGFSSEHHLSKFAEKFQEFKEAARLAKEKSQEKMELTSTPSQESAGGDLQSPLTPESINGTDD ERTPDVTQNSEPRAEPTQNALPFSHSSAISKHWEAELATLKGNNAKLTAALLESTANVKQWKQQLAAYQEEAERL HKRVTELECVSSQANAVHTHKTELNQTIQELEETLKLKEEEIERLKQEIDNARELQEQRDSLTQKLQEVEIRNKD LEGQLSDLEQRLEKSQNEQEAFRNNLKTLLEILDGKIFELTELRDNLAKLLECS

1174/2682 FIGURE 1058

GTAATGGTGGCAACAGTGAAGCTGTTCCTTTAACATCCCCAAATATAGCCAAGTTTAGCACTCCACCAGCCATCC TCAGAAAGAAGAAAAAATGCGAGTGGGTCATTCCCCAGGCAGCGAACTTAGGGATGGCTCATTGAACGATGGTG GTAATATGGCGCTAAAACATACACCACTGAAAACACTACCATTTTCTCCTTCACAGTTTTTCAACACATGTCCTG GTAATGAACAACTTAATATAGAAAATCCTTCATTTACATCAACCCCTATTTGTGGGCAGAAAGCTCTCATTACAA CTCCTCTTCATAAGGAAACAACTCCCAAAGATCAAAAGGAAAATGTAGGGTTTAGAACACCTACTATTAGAAGAT CTATACTGGGTACCACCAAGAACTCCTACTCCTTTTAAGAATGCGCTTGCTGCTCAGGAGAAAAAATATGGAC CTCTTAAAATTGTGTCCCAGCCACTTGCTTTCTTGGAAGAAGATATTCGGGAAGTTTTAAAAAGAAGAAACTGGAA CAGACCTATTCCTCAAAGAGGAAGATGAACCTGCTTACAAAAGCTGCAAACAAGAGAATACCGCTTCTGGGAAGA AAGTCAGAAAATCACTAGTCTTAGATAATTGGGAAAAAGAAGAATCAGGCACTCAACTGTTGACTGAAGACATTT CAGACATGCAGTCAGAAAATAGATTTACTACATCCTTATTAATGATACCATTATTGGAAATACATGACAATAGGT CTAACACTTCCAAAGTTGTCAAATTGGAAAAGAATCTTCAGTCAAATTGTGAATGGGAAACAGTGGTTTATGGGA AGACAGAAGACCAACTTATTATGACTGAACAAGCAAGAAGATATCTGAGTACTTACACAGCTACCAGTAGTACTT CAAGAGCTCTCATACTGTAATTGTTATTAAAATTGATGAAATGCCCCACTCCCTTACTGCAGTCTCTACTAAATT AGGTTGCAGTGAAATTTTTCTCAATTAGTTGTTTTTAAAGTTGTAAGATACCCTTTTAATACAGCATCTTTTTTC TATTCTATATAGTAGGCAGAAAGCTAGTAAGTCACTTAAGGGGTAGATAGTTTCATAGTTTATTTTTTAAGAGAT GAGATTTTTAAAAATTGTTTTTAAAGAACAAGATGGGAAAATAATAGAATGTTCATGGATTTCTAAAAGTAAATT TATATATGATTTCTGAAATTAGTCTATGTATGGAAAGCACACATGATTTTATGAAGGTACTTTTGCCCATGTGCT AAACAAAAAGCATTCAAAAAAGAGTTTTTTCTTTATTAGTAAATAGTATTTTCTTAATCTCAGAGGAGCTGAGAG TTTTGTTGAATGTATTGTACAGTATGTAGGAGCAGGAGAACTTTGTAAATTGGAAAGAAGTCTGTTTTTATAATT TATTTTTATTTTTAAAGCTTAAATGTAGATATTTATAGTATACAGGGAGCCTAGAAGCCAATGTTGTTTCCTGTT ATTACAGCTAACACAGTAAAGAATAATTTTGACTTTAAGTATGAAACAGTAGTAAGTTATAGCTGCAAAGAATAC AATATCTATACTGTATGTCACATCTACCTAAATGTTGCACTATGCCCTTTAAATCATGCTGGTTATAAAGTAGTT CTAAAAATGTACTAAATAATTAATATTTTCTTTTTAAATTATATCGGGGGTGGTCATATACATTAATCTGG GTCTGCACTTAGAAGTTATATTTACTCAGTGTTTCAGAAGTGGAGAACTTATCTTTTATTATAAAAATATTTTG TCCTTTTTTAAATGTTTTGTGTTTCTCTACAGGTTACAACAGTTGCTTCAGTTGCCTGTTTTAGGTGTTTTGCACT AATGGTGTGCTGTCAACTTAAACACTGACAGGTAAATAGAATTGTACACTGTAGTTTGAATTATTATAATTGAC ACACTCTCTCCCTCTCCACTCCTGAAGTATGCTGCTATAGAAAATAGCAGAATCGGCTTGCTGCTACGAGAGAAG GAAAGAGCGACCACCTCGCACTGTGTGAAAAGATAAAAAACAAATGATGGCAAGTTCTCAAGTTAACTAAATG GAATCAACCATTACCAGGCAAATTCTTGCAAATACCAAAATACTACTATGCCTTATAAAACAAAATGAAAGCAGG TTAAGATTTTCTGCTCTGTTTGTATGTTAATAGAAATGGAAATACTAAGTATTTTAATGCTTAGCTATTGAACAG TATATATATAGTGAGAAGTGAAGAAAATGTATGGTACTAAGATTATGCCTTATTGATAAATAGATAAACCAATTT AACCAATGATTGTAGCAAACTCATACTGGATCATTTCAGTTACCTTGAACTAATAGCACATAATGGTTTTTTGTT GTTGTTGTTTTAATGTAGCCCTTACCTGGATATACATAGTCTGCAATCACCAAAGTATAATATCTTGTAAGGCT ATATTTTTTAAAGCATATTTTTTCTTGAGCATTAAATTATCCTAAATGGTAATATATTGTGGATAAGTCTGGGCT TATTGGACATAATACATATTTGGGTTGGTACTGGTTGAATCCTTCAGTTAACTGCTTTGTTGCTTTTTTGCAAGAT TTTTTATCTTAAACATGTCAGGCATCTTAAGTCACCTTTATACTGTTTTGTTCCTCTGAGTTTCTTCAGTATGT TATTGTAAGGTTTTCACATTAATACAGCAATTACCCTGACTAAATTGAGTTTTGTGATATATGGAAAACTTCATT GTAAGAGAATCTTGCATACAATGTTGACTATTAACATCCAAAATAAAGCATCTGTGTACAAG

1175/2682 FIGURE 1059

GCGTGCTGGCCCGGGGTGGCAGGAGCCGCAGAGGCTTGGGCTGCAGAAAAAGGATCCTGTTTTGCTGTGTAATCCT GAGAATGGACTGCAAGAGAGAAAAACTGGGCGTCTGCTTGGGAATCTATTGTGGAAACCCAGGGTGTTTCCCGA GCTTGGGAGGAAATTGCAGAGGCCGTCAAC<u>ATG</u>GAAAAGCAGCCCCAGAACAGCAGGAGAGGCCTCGCCCCCGA GAGGTGCCGCCAGCTGTTGGGCTGCTGATCATGGCCCTGATGAATACTCTACTCTACCTCTGCCTCGACCAC TTCTTCATCGCTCCTCGACAATCCACTGTGGACCCCACACTGTCCCTATGGTCACTTCAGGATAGGACAGATG AAAAACTGCTCACCTTGGCTGTCCTGCGAGGAGCTGAGAACAGAAGTGAGACAGCTGAAGCGTGTTGGGGAAGGA GCTGTAAAGAGAGTCTTTCTGTCTGAGTGGAAGGAGCACAAAGTTGCACTCTCACAGCTCACCAGCCTGGAGATG AAAGATGATTTCCTCCATGGACTGCAGATGCTGAAATCTCTCCAAGGCACACATGTTGTCACGCTGCTTGGCTAT TGTGAGGATGACAACACTATGCTTACTGAATATCACCCTCTAGGTTCCTTGAGTAACCTGGAAGAAACACTAAAC CTTTCAAAGTACCAAAATGTGAACACGTGGCAGCACAGGCTGGAGCTGGCCATGGACTATGTCAGCATCATTAAT TACCTGCACCACAGCCCTGTGGGCACACGGGTCATGTGCGACTCCAACGACCTGCCGAAGACACTGTCCCAGTAT CTGCTAACAAGCAACTTCAGCATTTTGGCAAATGACTTGGACGCCTTACCCCTGGTGAACCACAGCTCCGGGATG GTGCCTTTCCACGATGATCTCATGCCCTCATATGATGAGAAGATTGACATTTGGAAGATCCCAGACATCTCCAGT CAGACTCCCTCAGAAAGACCCACTGCCCAGGACGTTCTGGAGACCTACCAGAAGGTCTTGGATACACTTAGAGAT GCCATGATGTCTCAGGCAAGAGAGATGCTG<u>TGA</u>AAACCAGTCCAGCCAATGAAGGTGGGATTGAAGGCTGAATG GAAGTTACAGCATTCTACTCTGATGGTGGAGTTTTTTGCCTGAGTTTCGTGTTTTATTGTTTTTTTATGGCTTA TTCTTTGAGATGCGGTCTTGCTCTGTTGCTGAGGCTGGAGTGCAGTGATGTGATCTTGGCTCACTGCAGCCTCTG CCTCCCAGGTTCAAGCAATTCTCCCACCTCAGCCTCCAAAGTGCTGGGATTACAGGCGTGAGCCACTGCGCCCGG CCACATTCAGTTCTTATCAAAGAAATAACCCAGACTTAATCTTGAATGATACGATTATGCCCAATATTAAGTAAA AAATATAAGAAAAGGTTATCTTAAATAGATCTTAGGCAAAATACCAGCTGATGAAGGCATCTGATGCCTTCATCT GTTCAGTCATCTCCAAAAACAGTAAAAATAACCACTTTTTGTTGGGCAATATGAAATTTTTAAAGGAGTAGAATA CTTAATTTGATTAATTTAATTCATGTATTATGATTAAATCTGAGGCAGATGAGCTTACAAGTATTGAAATAATTA CTAATTAATCACAAATGTGAAGTTATGCATGATGTAAAAAAATACAAACATTCTAATTAAAGGCTTTGCAACACCA **AAAAAAAAAAAAA**

1176/2682 FIGURE 1060

MEKQPQNSRRGLAPREVPPAVGLLLIMALMNTLLYLCLDHFFIAPRQSTVDPTHCPYGHFRIGQMKNCSPWLSCE ELRTEVRQLKRVGEGAVKRVFLSEWKEHKVALSQLTSLEMKDDFLHGLQMLKSLQGTHVVTLLGYCEDDNTMLTE YHPLGSLSNLEETLNLSKYQNVNTWQHRLELAMDYVSIINYLHHSPVGTRVMCDSNDLPKTLSQYLLTSNFSILA NDLDALPLVNHSSGMLVKCGHRELHGDFVAPEQLWPYGEDVPFHDDLMPSYDEKIDIWKIPDISSFLLGHIEGSD MVRFHLFDIHKACKSQTPSERPTAQDVLETYQKVLDTLRDAMMSQAREML

1177/2682 FIGURE 1061

1178/2682 FIGURE 1062

 ${\tt MKVSAALLCLLIMAATFSPQGLAQPDSVSIPITCCFNVINRKIPIQRLESYTRITNIQCPKEAVIFKTQRGKEVC} \\ {\tt ADPKERWVRDSMKHLDQIFQNLKP}$

1179/2682 FIGURE 1063

1180/2682 FIGURE 1064

 ${\tt MAKRTKKVGIVGKYGTRYGASLRKMVKKIEISQHAKYTCSFCGKTKMKRRAVGIWHCGSCMKTVAGGAWTYNTTS} \\ {\tt AVTVKSAIRRLKELKDQ}$

FIGURE 1065

1182/2682 FIGURE 1066

MAGPPRLLLLPLLLALARGLPGALAAQEVQQSPHCTTVPVGASVNITCSTSGGLRGIYLRQLGPQPQDIIYYEDG VVPTTDRRFRGRIDFSGSQDNLTITMHRLQLSDTGTYTCQAITEVNVYGSGTLVLVTEEQSQGWHRCSDAPPRAS ALPAPPTGSALPDPQTASALPDPPAASALPAALAVISFLLGLGLGVACVLARTQIKKLCSWRDKNSAACVVYEDM SHSRCNTLSSPNQYQ

1183/2682 FIGURE 1067

GGCACGAGGCTCTACAATCTGTGGCCTCAGCCCTTGCCAACTCTGCCTCTTCCCCCGCTGACTGGGCCTCTGCAG AGATGTGGGCAGCTGGTCAGGATGGCCATTCGGGCTCAGCACAGCAACGCAGCCCAGACTCAGACTGGGGAAGCA AACAGGGGCTGGACAGGCCAGGAGAGCCTGTCGGACAGTGATCCTGAGATGTGGGAGTTGCTGCAGAGGGAAAG GACAGGCAGTGTCGTGGCCTGGAGCTCATTGCCTCAGAGATACTATGGGGGAGCAGAGGTGGTGGATGAAATTGA GCTGCTGTGCCAGCGCCGGGCCTTGGAAGCCTTTGACCTGGATCCTGCACAGTGGGGAGTCAATGTCCAGCCCTA CTCCGGGTCCCCAGCCAACCTGGCCGTCTACACAGCCCTTCTGCAACCTCACGACCGGATCATGGGGCTGGACCT GCCCGATGGGGGCCATCTCACCCACGGCTACATGTCTGACGTCAAGCGGATATCAGCCACGTCCATCTTCTTCGA ACCAGCTGGCACTGACTGCTCGACTTTTCCGGCCACGGCTCATCATAGCTGGCACCAGCGCCTATGCTCGCCTCA TTGACTACGCCCGCATGAGAGAGGTGTGATGAAGTCAAAGCACACCTGCTGGCAGACATGGCCCACATCAGTG GCCTGGTGGCTGCCAAGGTGATTCCCTCGCCTTTCAAGCACGCGGACATCGTCACCACCACTACTCACAAGACTC TTCGAGGGGCCAGGTCAGGCTCATCTTCTACCGGAAAGGGGTGAAGGCTGTGGACCCCAAGACTGGCCGGGAGA TCCCTTACACATTTGAGGACCGAATCAACTTTGCCGTGTTCCCATCCCTGCAGGGGGGCCCCCACAATCATGCCA TTGCTGCAGTAGCTGTGGCCCTAAAGCAGGCCTGCACCCCCATGTTCCGGGAGTACTCCCTGCAGGTTCTGAAGA ATGCTCGGGCCATGGCAGATGCCCTGCTAGAGCGAGGCTACTCACTGGTATCAGGTGGTACTGACAACCACCTGG TGCTGGTGGACCTGCGGCCCAAGGGCCTGGATGGAGCTCGGGCTGAGCGGGTGCTAGAGCTTGTATCCATCACTG CCAACAAGAACACCTGTCCTGGAGACCGAAGTGCCATCACACCGGGCGGCCTGCGGCTTGGGGCCCCAGCCTTAA CTTCTCGACAGTTCCGTGAGGATGACTTCCGGAGAGTTGTGGACTTTATAGATGAAGGGGTCAACATTGGCTTAG TGGCCAACCTCAGGCAACGGGTGGAGCAGTTTGCCAGGGCCTTCCCCATGCCTGGTTTTGATGAGCATTGAAGGC ACCTGGGAAATGAGGCCCACAGACTCAAAGTTACTCTCCTTCCCCCTACCTGGGCCAGTGAAATAGAAAGCCTTT CTATTTTTTGGTGCGGGAGGGAAGACCTCTCACTTAGGGCAAGAGCCAGGTATAGTCTCCCTTCCCAGAATTTGT AACTGAGAAGATCTTTTCTTTTTCCTTTTTTTGGTAACAAGACTTAGAAGGAGGGCCCAGGCACTTTCTGTTTGA AGCAGGCAGGGTGGGTAGGCACCCTCCTTCCTGTTTTTATCTAATAAAATGCTAACCTGCCCTGAGTTTCCATT AAACTGGAGGGCCTTCAAGGCTCTCATCGCTGCTCAGTACAGCGGGGCTCAGGTCCGCGTGCTCTCCGCACCACC CCACTTCCATTTTGGCCAAACCAACCGCACCCTGAATTTCTCCGCAAATTTCCTGCCGGCAAGGTCCCAGCATT TGAGGGTGATGATGGATTCTGTGTGTTTGAGAGCAACGCCATTGCCTACTATGTGAGCAATGAGGAGCTGCGGGG GCGAATTCTGGGGCTGCTGGATGCTTACTTGAAGACGAGGACTTTTCTGGTGGGCGAACGAGTGACATTGGCTGA CATCACAGTTGTCTGCACCCTGTTGTGGCTCTATAAGCAGGTTCTAGAGCCTTCTTTCCGCCAGGCCTTTCCCAA TACCAACCGCTGGTTCCTCACCTGCATTAACCAGCCCCAGTTCCGGGCTGTCTTGGGCGAAGTGAAACTGTGTGA GAAGATGGCCCAGTTTGATGCTAAAAAGTTTGCAGAGACCCAACCTAAAAAGGACACACCACGGAAAGAAGAGAGGG TTCACGGGAAGAGGAGCAGAAGCCCCAGGCTGAGCGGAAGGAGGAGAAAAAGGCCGGCTGCCCCTGCTCCTGAGGA GGAGATGGATGAATGTGAGCAGGCCGCTGGCTGAGCCCAAGGCCAAGGACCCCTTCGCTCACCTGCCCAAGAG TACCTTTGTGTTGGATGAATTTAAGCGCAAGTACTCCAATGAGGACACACTCTCTGTGGCACTGCCATATTTCTG CATGAGCTGCAATCTCATCACTGGAATGTTCCAGCGACTGGACAAGCTGAGGAAGAATGCCTTCGCCAGTGTCAT CCTTTTTGGAACCAACAATAGCAGCTCCATTTCTGGAGTCTGGGTCTTCCGAGGCCAGGAGCTTGCCTTTCCGCT GAGTCCAGATTGGCAGGTGGACTACGAGTCATACACATGGCGGAAACTGGATCCTGGCAGCGAGGAGACCCAGAC GCTGGTTCGAGAGTACTTTTCCTGGGAGGGGGCCTTCCAGCATGTGGGCAAAGCCTTCAATCAGGGCAAGATCTT CAAG<u>TGA</u>ACATCTCTTGCCATCACCTAGCTGCCTGCACCTGCCCTTCAGGGAGATGGGGGTCATTAAAGGAAACT

1184/2682 FIGURE 1068

MHHNKQATENAKEEVRRILGLLDAYLKTRTFLVGERVTLADITVVCTLLWLYKQVLEPSFRQAFPNTNRWFLTCI NQPQFRAVLGEVKLCEKMAQFDAKKFAETQPKKDTPRKEKGSREEKQKPQAERKEEKKAAAPAPEEEMDECEQAL AAEPKAKDPFAHLPKSTFVLDEFKRKYSNEDTLSVALPYFWEHFDKDGWSLWYSEYRFPEELTQTFMSCNLITGM FQRLDKLRKNAFASVILFGTNNSSSISGVWVFRGQELAFPLSPDWQVDYESYTWRKLDPGSEETQTLVREYFSWE GAFQHVGKAFNQGKIFK

1185/2682 FIGURE 1069A

GTAGTGCTTTCTGCTCCGCACTCGCCGTGAGCCAGGTGTGCAACCGGATTTGGGGCGAGGGTCGCGCTGGCTACC TCGCATGCGCAGAGCCGGAAGCCCGCTGACCGGACTACAGCTCCCAGAAGAGCCCTTGTGGAGGCCGCAGACGCGA CGGGAGCCCAGTCTGCTAAAAGGGGAGGACGTTGAGGACGCGGGGGGCTGGCGGGAGAGACAGCTGGGGAGAGACA GAGGGGCGGGCTGACGCTCTGGTACCCGGAGTCGGCGCGCGGGGCAGGGGCGCCCCCTGCAGAGTGGGGACC CCACTGGGCTGTGCCATGCTGACCGGAGACCACCGAGGCGGGAGACAGAGCGCGGCGAAGAGCCATTGAGTGGTC ACCCAGTAGCCGCCGCCGCCGCCCCCCCGGGAAGCTTGCCACCCGCTAGGAGGGAAG<u>ATG</u>AAGGAGATTTGCAGG ATCTGTGCCCGAGAGCTGTGTGGAAACCAGCGGCGCTGGATCTTCCACACGGCGTCCAAGCTCAATCTCCAGGTT CTGCTTTCGCACGTCTTGGGCAAGGATGTCCCCCGCGATGGCAAAGCCGAGTTCGCTTGCAGCAAGTGTGCTTTC ATGCTTGATCGAATCTATCGATTCGACACAGTTATTGCCCGGATTGAAGCGCTTTCTATTGAGCGCTTGCAAAAG GAGATCAAGGCGGGGAATGGGACGGTTGACATGTCCGTCTTACCCGATGCGAGATACTCTGCACTGCTCCAGGAG GACTTCGCCTATTCAGGGTTTGAGTGCTGGGTGGAGAATGAGGATCAGATCCAGGAGCCACACAGCTGCCATGGT TCAGAAGGCCCTGGAAACCGACCCAGGAGATGCCGTGGTTGTGCCGCTTTGCGGGTTGCTGATTCTGACTATGAA GCCATTTGTAAGGTACCTCGAAAGGTGGCCAGAAGTATCTCCTGCGGCCCTTCTAGCAGGTGGTCGACCAGCATT AGCATGGAGGAAGAGACGCCTGGTTCCTCTGTGGAATCTTTGGATGCAAGCGTCCAGGCTAGCCCTCCACAACAG AAAGATGAGGAGACTGAGAGAAGTGCAAAGGAACTTGGAAAGTGTGACTGTTCTCAGATGATCAGGCTCCGCAG CATGGGTGTAATCACAAGCTGGAATTAGCTCTTAGCATGATTAAAGGTCTTGATTATAAGCCCATCCAGAGCCCC CGAGGGAGCAGGCTTCCGATTCCAGTGAAATCCAGCCTACCTGGAGCCAAGCCTGGCCCTAGCATGACAGATGGA GTTAGTTCCGGTTTCCTTAACAGGTCTTTGAAACCCCTTTACAAGACACCTGTGAGTTATCCCTTGGAGCTTTCA GACCTGCAGGAGCTGTGGGATGATCTCTGTGAAGATTATTTGCCGCTCCGGGTCCAGCCCATGACTGAAGAGTTG CTGAAACAACAAAAGCTGAATTCACATGAGACCACTATAACTCAGCAGTCTGTATCTGATTCCCACTTGGCAGAA CTCCAGGAAAAAATCCAGCAAACAGAGGCCACCAACAAGATTCTTCAAGAGAAACTTAATGAAATGAGCTATGAA CTAAAGTGTGCTCAGGAGTCGTCTCAAAAGCAAGATGGTACAATTCAGAACCTCAAGGAAACTCTGAAAAGCAGG GAACGTGAGACTGAGGAGTTGTACCAGGTAATTGAAGGTCAAAATGACACAATGGCAAAGCTTCGAGAAATGCTG CACCAAAGCCAGCTTGGACAACTTCACAGCTCAGAGGGTACTTCTCCAGCTCAGCÁACAGGTAGCTCTGCTTGAT CTTCAGAGTGCTTTATTCTGCAGCCAACTTGAAATACAGAAGCTCCAGAGGGTGGTACGACAGAAAGAGCGCCAA CTGGCTGATGCCAAACAATGTGTGCAATTTGTAGAGGCTGCAGCACACGAGAGTGAACAGCAGAAAGAGGCTTCT TGGAAACATAACCAGGAATTGCGAAAAGCCTTGCAGCAGCTACAAGAAGAATTGCAGAATAAGAGCCAACAGCTT CGTGCCTGGGAGGCTGAAAAATACAATGAGATTCGAACCCAGGAACAAAACATCCAGCACCTAAACCATAGTCTG AGTCACAAGGAGCAGTTGCTTCAGGAATTTCGGGAGCTCCTACAGTATCGAGATAACTCAGACAAAACCCTTGAA GCAAATGAAATGTTGCTTGAGAAACTTCGCCAGCGAATACATGATAAAGCTGTTGCTCTGGAGCGGGCTATAGAT GACTTAGAGAGACTGCGCGATGTCCTCCTCCAATGAAGCTACTATGCAAAGTATGGAGAGTCTCCTGAGGGCC AAAGGCCTGGAAGTGGAACAGTTATCTACTACCTGTCAAAACCTCCAGTGGCTGAAAGAAGAAATGGAAACCAAA TTTAGCCGTTGGCAGAAGGAACAAGAGAGTATCATTCAGCAGTTACAGACGTCTCTTCATGATAGGAACAAAGAA GTGGAGGATCTTAGTGCAACACTGCTCTGCAAACTTGGACCAGGGCAGAGTGAGATAGCAGAGGAGCTGTGCCAG CGTCTACAGCGAAAGGAAAGGATGCTGCAGGACCTTCTAAGTGATCGAAATAAACAAGTGCTGGAACATGAAATG GAGATTCAAGGCCTGCTTCAGTCTGTGAGCACCAGGGAGCAGGAAAGCCAAGCTGCTGCAGAGAAGTTGGTGCAA GCACCCATCTCTAACCAACAAGCTGAAGTTACCCCCACTGGCCGTCTTGGAAAACAGACTGATCAAGGTTCAATG CAGATACCTTCCAGAGATGATAGCACTTCATTGACTGCCAAAGAGGGATGTCAGCATACCCAGATCCACATTAGGA GACTTGGACACAGTTGCAGGGCTGGAAAAAGAACTGAGTAATGCCAAAGAGGAACTTGAACTCATGGCTAAAAAA GAAAGAGAAAGTCAGATGGAACTTTCTGCTCTACAGTCCATGATGGCTGTGCAGGAAGAAGAGCTGCAGGTGCAG GCTGCTGATATGGAGTCTCTGACCAGGAACATACAGATTAAAGAAGATCTCATAAAGGACCTGCAAATGCAACTG

FIGURE 1069B

GTTGATCCTGAAGACATACCAGCTATGGAACGCCTGACCCAGGAAGTCTTACTTCTTCGGGAAAAAGTTGCTTCA GTAGAATCCCAGGGTCAAGAAATTTCAGGAAACCGAAGACAACAGTTGCTGCTGATGCTAGAAGGACTAGTAGAT GAACGGAGTCGGCTCAATGAGGCCTTACAAGCAGAGAGACAGCTCTATAGCAGTCTGGTGAAGTTCCATGCCCAT CCAGAGAGCTCTGAGAGAGACCCGAACTCTGCAGGTGGAACTGGAAGGGGCTCAGGTGTTACGCAGTCGGCTAGAA GAAGTTCTTGGAAGAAGCTTGGAGCGCTTAAACAGGCTGGAGACCCTGGCCGCCATTGGAGGTGCAGCTGCAGGG GATGACACCGAAGATACAAGCACTGAGTTCACTGACAGTATTGAGGAGGAGGCTGCACACCATAGTCACCAGCAA $\mathtt{CTA} \underline{\mathbf{TAG}} \mathtt{CTTCAGAAGCATTTTTACTTGCAAGACGATGGACACATTCCCCTTGGGCTTTTTGTAACTGAAACGCAC$ CACAGAAGACAGGGAGTCATCGAAGGGCTGCTCGGGGAGGTGGCAGGGCGGAGGACCTGCTTGGGAAGAAACTCC AAGAAGATTGGAATGCTTCCAAAGCAAGAATCTTTCTCAGTGAAATCTCATTATACAAAGAGAACCTTATGCAAC CTGACAAACCACTGAGGTCATGGTGACTCAGTGATCAGCAGATGGTACTTCAACAGCAATCCCCTGTCAAAACCTC AGAACTTGAGGCTGAAACATTGCTTCCACCCACCATCAGTGAAGATGTAACTAGCATGTTACAAGAGTGAATAAT CTGGACTTCAGAGATTAAGTCACCAATAGTGATCTCACAAGCACTCACCGGAACTCCTATAATGTCTCCACTTTG TCCATGCCATTTAGCAATCTCATCTCCTAAATGGACTGTGCCTATGATTCTTAAGGAGAAAGTGAATCATTGGTA GATATCCTGCACAAGCAGCTGGACTTTCCAGTAATAGCTTTCTTGGGGCTATTAGGAAAATTAAACAAGAAATGA GGCTTTCTGGGTCTGCCTGTATGTCTTCTGCATAAGACAAAGAAGAGACATCGAATCAACCAATAAGAAGAGCCC AAATAAGCATCCTCAAATCTTTTGGGATTTGGCACTTGGGGACATGAGTAGTTGTCTGGGATACGTCATATTCTC AACAGTTTCTTTGTAGTAGTAGGATCACCTTCTTATAATAGGATCACCTTCTTGTTGCTATAGCTGTACCCGACC TTCCCTTCTCCCTTGAGTGCTTGCATGAGCTCCACTTTTCCTTTTGCTTGAACAGCTTCTCCTGAGTCCTCCTTA TTGAGGATCTTGGGTGAGAGAGGGACCTGCAGGATGAACAAATGTCTACTCTAAGACAGCTAGATTGGGAGGT TGGCTGGTCACTGATGGTTATAATGACTGTGGGACAGGATTAACTTCAGAATAAATGAACAGGAGACACAGATAT GAAGAAAGTTTCTGATTGATATGGTCTGAAGTACTCCTGGTATTGCAAGTCATTTGCTCTAATTCTCAATTGTAG GCAAACTGATTTGTAAATTTGCTTCTTCAGCCTTCTTTCCTGTAGCCTAGCATGGAGAATCTGACCAGACCCCAT TTTGAGAAGGTCAGCCTACACTGGAATGAACTTTTTACATTAGGGCATTTGTATTTCCCTCACAATACTTGCCAC ATTACTTGGCATAGGAGAGATGCTTAGTGTAATTATAAGTTAACAAGCCTTTGGATCAGGGCTTGACTCATGATA AATATATCTTCAGCTTTGGGTAGGAGGAATCTTGGTGTATGAAATCATTGCAAATTTACTTCATCTTTTCTGGAG TTTGAAGTTGTGACTCTCCTGCTACCAATTAAATAAAGCTTACTTTGCCAT

FIGURE 1070

MKEICRICARELCGNQRRWIFHTASKLNLQVLLSHVLGKDVPRDGKAEFACSKCAFMLDRIYRFDTVIARIEALS ${\tt IERLQKLLLEKDRLKFCIASMYRKNNDDSGAEIKAGNGTVDMSVLPDARYSALLQEDFAYSGFECWVENEDQIQE}$ PHSCHGSEGPGNRPRRCRGCAALRVADSDYEAICKVPRKVARSISCGPSSRWSTSICTEEPALSEVGPPDLASTK VPPDGESMEEETPGSSVESLDASVQASPPQQKDEETERSAKELGKCDCCSDDQAPQHGCNHKLELALSMIKGLDY ${\tt KPIQSPRGSRLPIPVKSSLPGAKPGPSMTDGVSSGFLNRSLKPLYKTPVSYPLELSDLQELWDDLCEDYLPLRVQ}$ ${\tt PMTEELLKQQKLNSHETTITQQSVSDSHLAELQEKIQQTEATNKILQEKLNEMSYELKCAQESSQKQDGTIQNLK}$ ETLKSRERETEELYQVIEGQNDTMAKLREMLHQSQLGQLHSSEGTSPAQQQVALLDLQSALFCSQLEIQKLQRVV ${\tt RQKERQLADAKQCVQFVEAAAHESEQQKEASWKHNQELRKALQQLQEELQNKSQQLRAWEAEKYNEIRTQEQNIQ}$ HLNHSLSHKEQLLQEFRELLQYRDNSDKTLEANEMLLEKLRQRIHDKAVALERAIDEKFSALEEKEKELRQLRLA VRERDHDLERLRDVLSSNEATMQSMESLLRAKGLEVEQLSTTCQNLQWLKEEMETKFSRWQKEQESIIQQLQTSL HDRNKEVEDLSATLLCKLGPGQSE1AEELCQRLQRKERMLQDLLSDRNKQVLEHEME1QGLLQSVSTREQESQAA AEKLVQALMERNSELQALRQYLGGRDSLMSQAPISNQQAEVTPTGRLGKQTDQGSMQIPSRDDSTSLTAKEDVSI PRSTLGDLDTVAGLEKELSNAKEELELMAKKERESQMELSALQSMMAVQEEELQVQAADMESLTRNIQIKEDLIK DLQMQLVDPEDIPAMERLTQEVLLLREKVASVESQGQEISGNRRQQLLLMLEGLVDERSRLNEALQAERQLYSSL VKFHAHPESSERDRTLQVELEGAQVLRSRLEEVLGRSLERLNRLETLAAIGGAAAGDDTEDTSTEFTDSIEEEAA HHSHQQL

1188/2682 FIGURE 1071

GTAGTGCCGCCGGGACTCTTGGCGGGTGAAGGTGTGTGTCAGCTTTTGCGTCACTCGAGCCCTGGGCGCTGCTTG CTAAAGAGCCGAGCACGCGGGTCTGTCATC<u>ATG</u>TCGCGTTACGGGCGGTACGGAGGAGAAACCAAGGTGTATGTT GGTAACCTGGGAACTGGCGCTGGCAAAGGAGAGTTAGAAAGGGCTTTCAGTTATTATGGTCCTTTAAGAACTGTA TGGATTGCGAGAAATCCTCCAGGATTTGCCTTTGTGGAATTCGAAGATCCTAGAGATGCAGAAGATGCAGTACGA GGACTGGATGGAAAGGTGATTTGTGGCTCCCGAGTGAGGGTTGAACTATCGACAGGCATGCCTCGGAGATCACGT TTTGATAGACCACCTGCCCGACGTCCCTTTGATCCAAATGATAGATGCTATGAGTGTGGCGAAAAGGGACATTAT GCTTATGATTGTCATCGTTACAGCCGGCGAAGAAGAAGCAGGTCACGGTCTAGATCACATTCTCGATCCAGAGGA AGGCGATACTCTCGCTCACGCAGCAGGAGCAGGGGACGAAGGTCAAGGTCAGCATCTCCTCGACGATCAAGATCT ATCTCTCTTCGTAGATCAAGATCAGCTTCACTCAGAAGATCTAGGTCTGGTTCTATAAAAGGATCGAGGTATTTC CAATCCCCGTCGAGGTCAAGATCAAGATCCAGGTCTATTTCACGACCAAGAAGCAGCCGATCAAAGTCCAGATCT CCATCTCCAAAAAGAAGTCGTTCCCCATCAGGAAGTCCTCGCAGAAGTGCAAGTCCTGAAAGAATGGAC<u>TGA</u>AGC TCTCAAGTTCACCCTTTAGGGAAAAGTTATTTTGTTTACATTATTATAAGGGATTTGTGATGTCTGTAAAGTGTA ACCTAGGAAAGATAATTCAACCATCTAATCAAAATGGATCTGGATTACTATGTAAATTCACAGCAGTAAGGATAA TATAAATTTTGTTGAATGTATGAACATCATATGGTCTGAAAATGTGGGTTTTTATTTGGCACATTTAAATAACAT GTTTCTAACTAGATTTTTGATTTGTGTTCAATATTAACACTTCTTAATTTGATATATTTGAGAGTCAGACATTAT AATTGTTAATCCTTATTCATACATACCTACATTCAGAATTGAAAGGTGTTGGTTAAGTCTTGAACATCACTATTC TATGCATAAAACTTGGCCAGGATCTTAAGGGACTTTGAAAATTCCATCTTACCCTTGTAGCTCTGGGTAAGATGA AGTAGGTATTGTATGATCAGTGGTGAAGCAAGTAGGACCACTGATGTGTCTAAATGAGCATGACAGGAACTAAAC GAAACTGATTAAATGTATGAGAAATAGAAACTGATTTCTGGATGATCTTTATACTAATTGCAGCTTTCAGGCTAC TAGGTGGCATAGTGTTAATTAGGACTCCCCAAGATATGGGGGAGTTCTACTCTCAATGGTCTTGTTTCTTTGCTTT CTACATTAGTTAACCAGTTTTATACCAAAAAATGCATGTTTGAGGAATTGTCTGAAATTGGGACAAAACACCTTC ATGTAAACCAGCTTTGCAAAATTTTCCAGCCCAGATACTCTTCATCTATTCAAATGGATTGTCTTATTCTGAGCA AAGACCTGTTGTTAATCTTCAAGCTAGGTTTTGCAGTTCCCAACCACAACATTCTTCTATTTTGCCAGGCTGGTG CAAAGTAATTAAAGATGTCAATCAGAAATGTCAATGAGACTAAAGTGGTTTTGTAAATCTCAGCTATATTTAGCA ACACTCCATGTAGCTAATATTTTTTGGTAGCATCTGGTAGACCTTAGAATGTTACATAGCCAGTAGGTTCTTTAT TCAAATTTTAAGTATCTTAAGAATAGTAGGGCAGTAACAGTTACTTTTGAGAGTTTTCTGGTCAAGCTTTTACCA GGCATTCTCTAGCCTTGGTACAAAAAAAAAAAAAAACCTGCTGGTTGCGCAGATACCTAGGCTTGTCCATTTTATG CATTTCAGCAAAGTCATTGGAGACTATTGCAACTTGGGAATACTGGTCTGCATCAAGTTTAATTCGGTAGTTTGA GTGTATAACTGGCAGGCTTATTTATCTGTTGCACTTGGTTAGCTTTAATTGTTCTGTATTATTTAAAGATAAGTT TACTCAACAATAA

1189/2682 FIGURE 1072

MSRYGRYGGETKVYVGNLGTGAGKGELERAFSYYGPLRTVWIARNPPGFAFVEFEDPRDAEDAVRGLDGKVICGS RVRVELSTGMPRRSRFDRPPARRPFDPNDRCYECGEKGHYAYDCHRYSRRRSSRSRSHSRSRGRRYSRSRS RGRRSRSASPRRSRSISLRRSRSASLRRSRSGSIKGSRYFQSPSRSRSRSRSISRPRSSRSKSRSPSPKRSRSPS GSPRRSASPERMD

1190/2682 FIGURE 1073A

CAAGCCAATTATGGCTCCCTTTCCCAATGGTAGTTTGTGAATGGCTTTAATTCGCCAGGATCTTATAAAACAAAT GCTGCTGCTATGAATATGGGTCGACCATTCCAAAAAAATCGTGTGAAGCCTCAGTTTAGGTCATCTGGTGGTTCA GAACACTCAACAGAGGGCTCTGTATCCTTGGGGGATGGACAGTTGAACAGATATAGTTCAAGAAACTTTCCAGCT GAACGGCATAACCCCACAGTAACTGGGCATCAGGAGCAAACTTACCTTCAGAAGGAGACTTCCACTTTGCAGGTG GAACAGAATGGGGACTATGGTAGGGGCAGGAGAACTCTCTTCAGAGGTCGAAGACGACGAGAAGATGACAGGATC TCAAGACCTCATCCTTCAACAGCTGAATCAAAGGCTCCAACACCAAAGTTTGACTTATTAGCCTCAAATTTTCCA CCTTTACCTGGAAGTTCATCAAGAATGCCAGGTGAACTCGTTTGGAGAATAGGATGTCTGATGTTAAAGGTG CTGCCCAGCAACTCAATATGAGTACCAGTTCTCCATGTGCTGAGCTTACTGCATTAAGCACAACTCAGCAAG AAAAGGATCTAATAGAAGATTCCTCTGTTCAGAAGGATGGTCTCAATCAGACAACTATACCAGTTTCTCCTCCAA GTACTACAAAGCCATCGAGGGCAAGTACTGCTTCACCATGTAATAATAACATAAATGCAGCTACAGCTGTGGCTC TACAGGAACCCCGAAAGTTAAGTTATGCTGAAGTGTGCCAGAAGCCCCCTAAAGAGCCCATCTTCAGTTCTTGTGC AGCCACTACGGGAACTTCGCTCCAATGTGGTGTCTCCCACCAAAAATGAAGACAATGGAGCTCCTGAGAACTCCG TTGAGAAACCACATGAGAAGCCAGAAGCAAGGGCTAGTAAGGATTATTCTGGCTTCCGAGGCAATATAATCCCCA GGGGAGCAGCAGAAAAATCAGGGAACAGAGACGCCAGTTTAGCCATAGGGCTATACCTCAGGGAGTGACTCGAC GTAATGGCAAAGAGCAATATGTGCCACCCAGATCACCAAAG<u>TAA</u>AAAACAACAAAACTATTCAAAAACTTCACTC TCTATTTTTGTTTTTGGTTTTAATTTGCAGAGATTTGCTGCCAGGAATCAATTTTGAGGGTTCAGATTTAGCTTG TTCTGTAAAATTAGAAATTACTTTTTTAATCTATTTAAAGTTTGGCTTGAAGAATGCCATCTCTGACTATATGG CCTTGTATTGCAAAGCAGATCAGTGGCTGGGGTGCCTGTTGTGGGTGTGAGTGTACAAGAGCGATTGAAGCCA TTTAGTCTGTCTTTTTGACCTTACTAATATTTCATTTAACAAGTTGTAAAACTCTGATTGTACTTAGAGATGTGA CTACCAATCAGTTTGATACTCAAGGAAAGGGGGTTATTCAAGAAATTGAAAATTTCATCTTGGACCTCAGTGCAT CGGTCAAATGGATTTCAGAGGTTTAAACTTCCCTGTGATTCCCCCTGAATACCCCCCAAAATGAGAAACAAAATTT TCAATTGTGTGTTTGTAATTGCTTTGAGCAGTCTAGTCAAATCATATAAATTGTTCTAAATTTCAGAATTGAACA TTGAAGTATTAACTCTTCTGTTCACACATTTAGAATTTTAGCTCCCAAGATGGTAGGGCAGACTGACCGTACAGT AATTTATTTGTCGTTAGTGTTAAAGATTAAGCATAGTAACTGACTCTTAAGTGTTAAATAATGTAGAAGTAAAAA TCTCCCCCCACACCAAAATACAGTTTGGAATTCACTGAAACAGTACCAGCAAGTCATGAGATTTTTTAGTA AAGATGAGAAAGATGGTTGAAGAAAATTAGTGCATAATTTCTCAGTGAATAAAGTTGTAGCTCTCATATACTAAA TAGACAAGTTTACATGCTGTTATTTAGAAAATGACTAAAATATTAAAAACCGTGTTGTGTTAATCTGTTTTAAGT TCCCATATGTTAGTAAATTACATATGTACAAATTGAAACTGTAAATTGTGAACACTGGAAAGCACCATTGTGACA TAGAGTAAACATCTTAGTAATATATTAAAGTGAATGTAAATGGTGGTTAAAATTACATTACTGTGAAATTCATCT TCCAACTCTAAGTTAAGCTTTGGAGATACATGTTAGTGGTTAACTGTTAAGAGCTTTGAAAACACTGCACATATC TGTACAAGCCAGAATTACTATTTCTTTGACTTATTATTAGCTTGGCAGTTGCTTTTGATTTGATTTATTATGAC ATGGTATACTACTATATTTACTCAGTTTGAAACTATTCATTTCTACACACTATTTTTAAAAATTGCCTACTAGGT GACTACATCTATGATAAAAGTGCTTATTTTGGTTTACTAAGATAATGCAGTTGGTGGAAATGATAAACGTTTTAA GTGTTAACATCCTTTGAATGCGTTGGATTTCAGAGAATAAACATTTTGTAAAAATCACTTGGTAAGGATTATAAA CTTAATTACTGCACTTAAAATGAAACATTACTTTTTTTAAACAATGTGTCACAAATGTAGGTCTGTATTACTTGT ATGCTTGTGTGACTTACTGTTAGTCCAGCTCTAAAAATTTAAAGGTTGTAATTGAAATACAAGAAAAGAGCCTTC TTTTAGAAGAAAGCAAGTATATTTTTGCTTTTACTTCAAATGTTATTTAAAGTAGAAATTTAATTTGTAGATATA ACCTTTAAAAATTTTCTCATTAAGACAATGTTTTTAATTTAATTTGCCTCATTACATCTAATAGTTCCCATTTGA

FIGURE 1073B

TATTTAGCATTTATTTATTACAGCAGATTTAAAGTTTGTATCTAAATAATGCCTATGAGTTGTGTGAAGCTCTT GGAGGAATTTAAAAAATCAAATTTTTCTCTTCACCTTTATGACTTGACATTTCCTTGATCTGTTGGAGGCTAAAA GTAGGTATAAATGATATTGAATGTTGGGTATAGTGATACTCTGCCATAGTTCTTACTGCATGAAGAGAACAAGAG TCACACAAGTTCACCACTTTGCACTTCATAGAGAAGGTACATAGAGACATTGCAAAAACCTGTCTCCATTTGCTAT CCTGATAATTAAGGTTTTCATAATACCTAGGGCCTGTCTCTGAGTAATTTTAATTTTGCCAAATACACTGACATT TAAAATAGTGATCCATCTAAATTTTTTTCAGCTGGGTTTTGAGGAATATAAGAGCTTTCAATGATAAAGGTTTGT TGATGGAATGTTAGCATCTTCACTAGGGTAAAGAAGAACAAAAAGAATGTTGCTGGAACGTAAAATAGTATTTAA AAGTTAATGAACACTTCTCTAGTTTTCTTAGTTATGGCCTTAATAATTAGTCTCTTGGCTTAAATGTCCACTGGT TTTTAAAAGTACCAATTTTGTTTTTACAGAAAAGATAAAACTCAAAAGAGAACAGTGTATTCCTTCTGAGGGGCT TTTATAAATTATTAACTATAATATATGATGGATTTTTTCCTAATTTTTTATATTTCCTTACAATTTTGGTGGCCA TTAATTTAACTTTAGGCTTTTGGGCATATGCTAGTCTGAGCTTCCGAAAAGATACATATATGTTTCCCTTTTCAT TAGCTGAATGAGGATATTTTAAGAAGTTGAAAGAGAATTTATTTTCAAGTTGTGAGTAAATCCTCCTTTGAAATT CACCTGATTATTAGATAACTTAAAGTTTATTTTTAAAAGCTGACAACTTTTTATGAATCTTCGAGTTGACAGTTC CTAAAAGCGTAACTCAGATATTAATGGGCTGTGTATTAAATGGTTTTATTTTCAGTTTTGCAGCACAGAACACTG TTGAAATATCCATATCAACTTGATTTTTTTAACCTAATTCAGGTGTCCTTTGCATCTCTTAAATGTTGGGGGTGG GGGTCAGAGCCAGTTATCCGGCTTCTGTTTTGTCGATTGCTTAGATTTGTTCCTGTTGTCAAAACTGTTACCCCC AAAATTGGTGTGACACATGCTCATGCATAAAATGTTAAAATGAGTACATCCTTGTATTTGTATTTGTTTTCAACA

1192/2682 FIGURE 1074

MNMGRPFQKNRVKPQFRSSGGSEHSTEGSVSLGDGQLNRYSSRNFPAERHNPTVTGHQEQTYLQKETSTLQVEQN GDYGRGRRTLFRGRRREDDRISRPHPSTAESKAPTPKFDLLASNFPPLPGSSSRMPGELVWRIGCLMLLKVSTK KRIMKSTISCPVPADEQTECTSAQQLNMSTSSPCAAELTALSTTQQEKDLIEDSSVQKDGLNQTTIPVSPPSTTK PSRASTASPCNNNINAATAVALQEPRKLSYAEVCQKPPKEPSSVLVQPLRELRSNVVSPTKNEDNGAPENSVEKP HEKPEARASKDYSGFRGNIIPRGAAGKIREQRRQFSHRAIPQGVTRRNGKEQYVPPRSPK

FIGURE 1075

 \mathtt{CGAGC} GCACCGTGACGGGGCTCCACTGTGTCGGGGACACCTACCCCAGCAACGACCGGTGCTGCCACGAGTGCAGGCCAG GCAACGGGATGGTGAGCCGCTGCAGCCGCTCCCAGAACACGGTGTGCCGTGCGGGCCGGGCTTCTACAACG ACGTGGTCAGCTCCAAGCCGTGCAAGCCCTGCACGTGGTGAACCTCAGAAGTGGGAGTGAGCGGAAGCAGCTGT GCACGGCCACACAGGACACAGTCTGCCGCTGCCGGGCGGCACCCAGCCCCTGGACAGCTACAAGCCTGGAGTTG ACTGTGCCCCTGCCCTCCAGGGCACTTCTCCCCAGGCGACAACCAGGCCTGCAAGCCCTGGACCAACTGCACCT TGGCTGGGAAGCACCCTGCAGCCGGCCAGCAATAGCTCGGACGCAATCTGTGAGGACAGGGACCCCCCAGCCA CGCAGCCCCAGGAAACCCAGGGCCCCGGCCAGGCCCATCACTGTCCAGCCCACTGAAGCCTGGCCCAGAACCT CACAGGGACCCTCCACCCGGCCCGTGGAGGTCCCCGGGGGCCGTGCGGTTGCCGCCATCCTGGGCCTGG TGCTGGGGCTGCTGGCCCCTGGCCATCCTGCTGGCCCTGTACCTGCTCCGGAGGGACCAGAGGCTGCCCCCCG ATGCCCACAAGCCCCCTGGGGGAGGCAGTTTCCGGACCCCCATCCAAGAGGAGCAGGCCGACGCCCACTCCACCC $\tt TGGCCAAGATC{\color{red}{\textbf{TGA}}}CCTGGGCCCACCAAGGTGGACGCTGGGCCCCGCCAGGCTGGAGCCCGGAGGGTCTGCTGGG$ GTGCCGCCACCAGCCCCTGAGCCCTGTTTCCCCCCACTACTCTTCCAAATTTGTGGAGACAGGGCTCAGGGGCC TGGTGGCGGCACTGTATGTTATGCTGGGCATGACGGCCATGACTTCGGCTATCTTCTGTTTTAGGTCCTTGATTT CCTGATCTTTCTGAAGGATTTGTCCTTGGGCAATCTCGAGCTGCCGCTTTGCATCGCCCAGTGCGGAGAACAGGT AAAAGGTCAAAAAAAAAAAAAAAA

1194/2682 FIGURE 1076

MCVGARRLGRGPCAALLLLGLGLSTVTGLHCVGDTYPSNDRCCHECRPGNGMVSRCSRSQNTVCRPCGPGFYNDV VSSKPCKPCTWCNLRSGSERKQLCTATQDTVCRCRAGTQPLDSYKPGVDCAPCPPGHFSPGDNQACKPWTNCTLA GKHTLQPASNSSDAICEDRDPPATQPQETQGPPARPITVQPTEAWPRTSQGPSTRPVEVPGGRAVAAILGLGLVL GLLGPLAILLALYLLRRDQRLPPDAHKPPGGGSFRTPIQEEQADAHSTLAKI

1195/2682 FIGURE 1077

 ${\tt CACGCAGCAGGATG}{\tt GCAAGGGCTCCGCTTGGGGTCCTGCTCCTCTTGGGGCTTCTCGGCAGGGGTGTGGGGAAGA}$ ACGAGGAACTGCGTCTTTATCACCATCTCTTCAACAACTATGACCCAGGAAGCCGGCCAGTGCGGGAGCCTGAGG CTAGCGTCTGGATTGGAATCGATTGGCAGGATTACCGACTCAACTACAGCAAGGACGACTTTGGGGGGTATAGAAA CCCTGCGAGTCCCTTCAGAACTCGTGTGGCTGCCAGAGATTGTGCTGGAAAACAATATTGATGGCCAGTTCGGAG TGGCCTACGACGCCAACGTGCTCGTCTACGAGGGCGGCTCCGTGACGTGGCTGCCTCCGGCCATCTACCGCAGCG TCTGCGCAGTGGAGGTCACCTACTTCCCCTTCGATTGGCAGAACTGTTCGCTTATTTTCCGCTCTCAGACGTACA ATGCCGAAGAGGTGGAGTTCACTTTTGCCGTAGACAACGACGGCAAGACCATCAACAAGATCGACATCGACACAG AGGCCTATACTGAGAACGGCGAGTGGGCCATCGACTTCTGCCCGGGGGTGATCCGCCGCCACCACGGTGGCGCCA CCGACGGCCCAGGGGAGACTGACGTCATCTACTCGCTCATCATCCGCCGGAAGCCGCTCTTCTACGTCATTAACA AATGCACGGTCTCCATCAACGTCCTGCTCGCCCAGACCGTCTTCTTGTTCCTCATTGCCCAGAAAATCCCAGAGA CTTCTCTGAGCGTGCCGCTCCTGGGCAGGTTCCTTATTTTCGTCATGGTGGTCGCCACGCTCATTGTCATGAATT TGGAGCTGCTGCCGCCCTCCTGGGCTCCCCGCCGCCCGAGGCCCCCCGGGCCGCCTCGCCCCAAGGCGGG GGCAGAGGCACCGGCAGGGGACCTGGACGGCTGCCTTCTGCCAGAGCCTGGGCGCCGCCGCCCCCGAGGTCCGCT GCTGTGTGGATGCCGTGAACTTCGTGGCCGAGAGCACGAGAGATCAGGAGGCCACCGGCGAGGAAGTGTCCGACT GGGTGCGCATGGGGAATGCCCTTGACAACATCTGCTTCTGGGCCGCTCTGGTGCTCTTCAGCGTGGGCTCCAGCC CGACTTCAATTTCCCACCCATCTCCAGTAGGAAATTGATTTTGAAAAAGTAGGCTGCCGCCACCACGGCATTATG ATCCCTTCCCCCTGCTGATCAATCTGCAGTTTGTGAACTTCACAAGAATGGTGTGCCCCGTTCCCTGGCGTGTG ${\tt TAGGCCTGGCCGCAGTCCAGGGGTCAGCAGGAGGAAAGGGTTCACATAGGCTCTCAGGTGCCAGTCTTCCAGAAA}$ GCAAGGACTGCCCTTCATTCAGCCTTGCTGACCTCCCAGCCTTTCTAAGGCTCAGCCCCACGGGACTCTGGTGGC TGCCAGCTTGTGAGCTATCTATCTATATTCATTCATAGCCAAACAGGAGACCCCTTTGCAGGACTTGCACACAG GGAGGCTGTAGCCAGGAAACCCTCTTCTTCCCTGGTCTGGCTCTGCTGGAGCGGGTGGGAACCAAACACCTTCAG TGCTGGTGGCCCTCAGGCCCACAGGTTTAAGGCTGAGGCTGCCCTGACCCTTCCACAGTCATTTCTTCTAGGTTT CCCCACCCTGGAGGCTCTCTCTGCCTAGTCTACAGTACTGACAGAAAGCAAGGACATGCGGCCTGCATGGTGGGA TCCCTCCACCGGGGAAGGGCATGGGCTAGAAGAGGAGAGGGGGGTCGGGAATGGGGGGAATGTTTTGGCTGCGGG GTCCCCCTCCATTCCCTGGAGTTTGGGGGAAGGGGAATCATTAAAGTGCTTTCAGA

FIGURE 1078

MARAPLGVLLLGLLGRGVGKNEELRLYHHLFNNYDPGSRPVREPEDTVTISLKVTLTNLISLNEKEETLTTSVW
IGIDWQDYRLNYSKDDFGGIETLRVPSELVWLPEIVLENNIDGQFGVAYDANVLVYEGGSVTWLPPAIYRSVCAV
EVTYFPFDWQNCSLIFRSQTYNAEEVEFTFAVDNDGKTINKIDIDTEAYTENGEWAIDFCPGVIRRHHGGATDGP
GETDVIYSLIIRRKPLFYVINIIVPCVLISGLVLLAYFLPAQAGGQKCTVSINVLLAQTVFLFLIAQKIPETSLS
VPLLGRFLIFVMVVATLIVMNCVIVLNVSQRTPTTHAMSPRLRHVLLELLPRLLGSPPFPEAPRAASPPRRASSV
GLLRAEELILKKPRSELVFEGQRHRQGTWTAAFCQSLGAAAPEVRCCVDAVNFVAESTRDQEATGEEVSDWVRM
GNALDNICFWAALVLFSVGSSLIFLGAYFNRVPDLPYAPCIQP

FIGURE 1079

CTGGTCAGGATGGCCATTCGGGCTCAGCACAGCAACGCAGCCCAGACTCAGACTGGGGAAGCAAACAGGGGCTGG ACAGGCCAGGAGAGCCTGTCGGACAGTGATCCTGAGATGTGGGAGTTGCTGCAGAGGGAGAAGGACAGGCAGTGT CGTGGCCTGGAGCTCATTGCCTCAGAGAACTTCTGCAGCCGAGCTGCGCTGGAGGCCCTGGGGGTCCTGTCTGAAC TGCCAGCGCCGGGCCTTGGAAGCCTTTGACCTGGATCCTGCACAGTGGGGAGTCAATGTCCAGCCCTACTCCGGG TCCCCAGCCAACCTGGCCGTCTACACAGCCCTTCTGCAACCTCACGACCGGATCATGGGGCTGGACCTGCCCGAT GGGGGCCATCTCACCCACGGCTACATGTCTGACGTCAAGCGGATATCAGCCACGTCCATCTTCTTCGAGTCTATG CGGCTCATCATAGCTGGCACCAGCGCCTATGCTCGCCTCATTGACTACGCCCGCATGAGAGAGGTGTGTGATGAA GTCAAAGCACCTGCTGGCAGACATGGCCCACATCAGTGGCCTGGTGGCTGCCAAGGTGATTCCCTCGCCTTTC AAGCACGCGGACATCGTCACCACCACTACTCACAAGACTCTTCGAGGGGCCAGGTCAGGGCTCATCTTCTACCGG AAAGGGGTGAAGGCTGTGGACCCCAAGACTGGCCGGGAGATCCCTTACACATTTGAGGACCGAATCAACTTTGCC GTGTTCCCATCCCTGCAGGGGGGCCCCCACAATCATGCCATTGCTGCAGTAGCTGTGGCCCTAAAGCAGGCCTGC ACCCCCATGTTCCGGGAGTACTCCCTGCAGGTTCTGAAGAATGCTCGGGCCATGGCAGATGCCCTGCTAGAGCGA GCTCGGGCTGAGCGGGTGCTAGAGCTTGTATCCATCACTGCCAACAAGAACACCTGTCCTGGAGACCGAAGTGCC ATCACACCGGGCCGGCCTGCGGCCTTGGGGCCCCAGCCTTAACTTCTCGACAGTTCCGTGAGGATGACTTCCGGAGA GTTGTGGACTTTATAGATGAAGGGGTCAACATTGGCTTAGAGGTGAAGAGCAAGACTGCCAAGCTCCAGGATTTC AAATCCTTCCTGCTTAAGGACTCAGAAACAAGTCAGCGTCTGGCCAACCTCAGGCAACGGGTGGAGCAGTTTGCC AGGGCCTTCCCCATGCCTGGTTTTGATGAGCAT<u>TGAA</u>AGGCACCTGGGAAATGAGGCCCACAGACTCAAAGTTACT AGGGCAAGAGCCAGGTATAGTCTCCCTTCCCAGAATTTGTAACTGAGAAGATCTTTTCTTTTTCCTTTTTTTGGT AACAAGACTTAGAAGGAGGGCCCAGGCACTTTCTGTTTGAACCCCTGTCATGATCACAGTGTCAGAGACGCGTCC AGCTCACCGCACCGCCAGATCGTTCGATGCGCACACGGGGCGCTATACCTGCAACCCCTCCCCAACTCCTACTCG TCCTGCCACCCACTCTGGGGACCCCTCTCCTCTCTCAGGCAGCCAGTTGCTTCCTGCTTTGGGTTCCCAGGGCGC AAAACCCTTGGTGTGTGCCAGGACCCGTGTTGGGCTCAGAACAAGGTAGAATGGGAACAAGATAGAATGAGGACA GCCCCTGTGGAGCTCACAGTGTAATCATTGTTCCTGTGTCTGCTCTCCCTCTGTCATTCTGCTGGTTTTCTCTTA GAGTTTGGGGGAGGAAGGAAGTAGCCTGGGATTTGACCATCTCTGGGCTTTGCACAGAGGGGCCTCTCTGATATT AATGAGCTGGGACCCAGCTCAGGGCAGTGGAGTACTTGGGCCTCCAGCATCAGAAAAACCTGCAGGAACATGCAG ATTCCTGAGCCTCCTTATTCCCTACAGAATCAAGACTGTCTGGGGCAGACCTGAGAATCTGCATTTTAAGAAGAT GATTCTCAGGCATCCCGAAGATTGAGATCTGTTGCCTCAAGGACTCCAGCCTTCTTGGACATTTATTGTGAAATT ACCAGAACAGCATTTGGTCTTACACATACTGATCTCTGTTCTGTCTTTTTTGGTCATTAAGCTCTCTGGGAGCA GAGGTGCTATCTACTTGTCCTTTTGCTCTCCCCGACCCTACCCCCAAGAGCTCAGCGACTTTTATTGCAGATGTC TTTAGAGGCTCTTGGACACAGTGTCTTCCTGTTTCTCATCCTCCTTGCAGGTTGGACTCTTCACAGAAATTGG GCCCATGTCTTGCTTCATCTCTCGACATTCCATCCCTTCAGAGATGGAGTTTGATCCTAACTCCAACCCACCATG TTACAAGACAATGGATGAGGATATTGTGATTCAGCAGGACGATGAGATCCGCTTAAAGATTGTGGGGACCCGTGT GGACAAGAATGACATTTTTGCTATTGGCTCCCTGATGGACGATTACTTGGGGCTTGTAAGCTGAGCCTGGTGGCC TCCTACCCTTGGTCCTACTCTAGGAAGTGTGATTGTCACACTTATCATGTTGTCCAGAGGTCCAGTCTGGCTGCT GTTGTGGAGGCAAGGAAGCCAACTCATCCCAGAAGGCATCTGGTGCTTCTTGTAGCTTAACTACTGCCTCCTCAT

1198/2682 FIGURE 1080

MLYFSLFWAARPLQRCGQLVRMAIRAQHSNAAQTQTGEANRGWTGQESLSDSDPEMWELLQREKDRQCRGLELIA SENFCSRAALEALGSCLNNKYSEGYPGKRYYGGAEVVDEIELLCQRRALEAFDLDPAQWGVNVQPYSGSPANLAV YTALLQPHDRIMGLDLPDGGHLTHGYMSDVKRISATSIFFESMPYKLNPKTGLIDYNQLALTARLFRPRLIIAGT SAYARLIDYARMREVCDEVKAHLLADMAHISGLVAAKVIPSPFKHADIVTTTTHKTLRGARSGLIFYRKGVKAVD PKTGREIPYTFEDRINFAVFPSLQGGPHNHAIAAVAVALKQACTPMFREYSLQVLKNARAMADALLERGYSLVSG GTDNHLVLVDLRPKGLDGARAERVLELVSITANKNTCPGDRSAITPGGLRLGAPALTSRQFREDDFRRVVDFIDE GVNIGLEVKSKTAKLQDFKSFLLKDSETSQRLANLRQRVEQFARAFPMPGFDEH

1199/2682 FIGURE 1081

1200/2682 FIGURE 1082

MDQQAIYAELNLPTDSGPESSSPSSLPRDVCQGSPWHQFALKLSCAGIILLVLVVTGLSVSVTSLIQKSSIEKCS VDIQQSRNKTTERPGLLNCPIYWQQLREKCLLFSHTVNPWNNSLADCSTKESSLLLIRDKDELIHTQNLIRDKAI LFWIGLNFSLSEKNWKWINGSFLNSNDLEIRGDAKENSCISISQTSVYSEYCSTEIRWICQKELTPVRNKVYPDS

FIGURE 1083A

GCCCAGATCGGAAGTGACGGAGACGTGCTAGCGCGTCGAAGGTAGCTCTATGGTTTTCCTCGCGTTCTTGAGTC GGGAAATGGCCGCTGTGTGGTTGCAACGGAGATAAATTCCCGGAACCGCGATTCGGCGTGTCAGGAATTCGAATT TAGAGTTTAATTTCTCAGAGCATTCTCTCCAGGAAGAATTTTTACAGTATCTCAAAGACTTCACTTGACTTCTTG ATCCTGCATAAAACCAAGGAGAAAAGAAATCGGTCGCTCCAATTCTAGATCACATTCTTCAAGGTCAAAGTCTAG AACATATTCAAGGTCTCGTAGTAGAGATCGTATGTATTCTAGAGATTATCGTCGCGATTACAGAAATAATAGAGG AATGAGACGACCTTATGGGTACAGAGGAAGGGGTAGAGGGTATTATCAAGGAGGAGGAGGTAGATATCATCGAGG TGGTTATAGACCTGTCTGGAATAGAAGGCACTCTAGGAGGTCCTAGACGAGGTCGTTCACGTTCCAGGAGTCCAAA AAGAAGATCCGTTTCTTCTCAAAGATCCAGAAGCAGATCTCGCCGGTCATATAGATCTTCTAGGTCTCCAAGATC CAAAAAAGCTGAAGGGGAACCCCAAGAAGAGGGCTCCGTTGAAAAGTAAATCACAGGAGGAACCGAAAGATACATT TGAACATGACCCATCTGAGTCTATCGATGAATTTAATAAGTCATCAGCCACATCCGGTGATATTTGGCCTGGCCT TTCAGCTTATGATAATAGTCCTAGATCACCCCATAGTCCTTCACCTATTGCTACACCACCTAGTCAGAGTTCATC TTGCTCTGATGCTCCCATGCTCAGTACAGTTCACTCTGCAAAAAATACTCCTTCTCAGCATTCACATTCCATTCA GCATAGTCCTGAAAGGTCTGGGTCTGGTTCTGTTGGAAATGGATCTAGTCGATACAGTCCTTCTCAGAATAGTCC AATTCATCACATCCCTTCACGAAGAAGTCCTGCAAAGACAATCGCACCACAGAATGCTCCAAGAGATGAGTCTAG GGGCCGTTCCTCGTTTTATCCTGATGGTGGAGATCAGGAAACTGCAAAGACTGGGAAGTTCTTAAAAAGGTTCAC AGATGAAGAGTCTAGAGTATTCCTGCTTGATAGGGGTAATACCAGGGATAAAGAGGCTTCAAAAAGAGAAAGGATC AGAGAAAGGGAGGGCAGAGGGAGAATGGGAAGATCAGGAAGCTCTAGATTACTTCAGTGATAAAGAGTCTGGAAA TCTACTCCAAACCCCTACCACTACAAAAGATAAGCACAAAGAAGAAGAAAAATTCTGAAAGAATAACAGTAAA GAAAGAACTCAGTCACCTGAGCAGGTAAAGTCTGAAAAGCTCAAAGACCTCTTTGATTACAGTCCCCCTCTACA CAAGAATCTGGATGCACGAGAAAAGTCTACCTTCAGAGAGGAAAGCCCACTTAGGATCAAAATGATAGCGAGTGA TTCTCACCGTCCTGAAGTCAAACTCAAAATGGCACCTGTTCCTCTTGATGATTCTAACAGACCTGCTTCCTTGAC TAAAGACAGGCTGCTTGCTAGTACACTTGTCCATTCTGTCAAGAAGGAGCAAGAATTCCGATCCATCTTTGACCA CATTAAGTTGCCACAGGCCAGCAAAAGCACTTCAGAGTCATTTATTCAACACATTGTGTCCTTGGTTCATCATGT TAAAGAGCAATACTTCAAGTCAGCTGCAATGACCCTAAACGAGCGGTTCACTTCGTATCAGAAAGCCACTGAAGA ACATAGTACTCGGCAAAAGAGCCCTGAAATACACAGGAGAATTGACATCTCACCAAGTACCCTGAGGAAGCATAC CCGTTTAGCAGGGGAAGAGAGAGTTTTTAAAGAAGAAAATCAAAAGGGAGATAAAAAATTAAGGTGTGACTCTGC ATCCAGTGGATCAAGAAAGCAGGAAAAAACTCCAAAAGATTACAAGGAATACAAATCTTACAAAGATGACAGTAA **ACATAAAAGAGAGCAAGATCATTCTCGATCTTCATCCTCTTCAGCATCACCTTCTTCTCCCAGTTCTCGAGAAGA AAAGGAGAGTAAGAAGGAAGAAGAAGAATTTAAAACTCACCATGAAATGAAAGAATACTCAGGCTTTGCAGG** AGTTAGCCGACCACGAGGAACCTTTTTTCGAATTAGAGGCAGAGGAAGAGCCAGAGGAGTTTTTGCTGGGACAAA AAAGAGCAAGAAGTACTTCTTGCATGACGACAGAGATGATGGTGTGGATTATTGGGCCAAAAGAGGAAGAGGTCG TGGTACTTTCAACGTGGCAGAGGGCGCTTTAACTTCAAAAAATCAGGTAGCAGTCCTAAATGGACTCATGACAA ATACCAAGGGGATGGGATTGTTGAAGATGAAGAAGAAGACCATGGAAAATAATGAAGAAAAGAAGGACGCAA TTTTTGTTTTCAAATAAGAATGTAAGCATTTTACTTAAATTTTACTGTTTGCAAGTAGTCTATAGAAATTTTGTT TTAAGTCTTCAAATATCTTGAGAAATAGTAGACTGTATGTTGAAAATTGTACTGAAAATAAAGTAGAAAATTGTTA CGTACCATATTTGTAACTATCAACTTTTAAAACTTTTAACGTTTTTGTTACATGCATTGTAATTCTGCTTTGTCT AGTAAACGTTAGCTCTACATATAAATCCTGGAACAGAAATTGTTTATAGAGACTACACTAATTATTTTAACTGTA TACATCTGTTTAATTTGAACACCACTACATCGTAGGGTGACTGATTTTTGAAGTATACCACAGACAAAAAGTTGTT

1202/2682 FIGURE 1083B

TGGCCTATAAAGAACATTCTTAGGAGCCTTTTCTATTTGCGTTCAAAACTGTGTGTTCTCTTTCTATTCCTATTT GATAGTTTGAGTCATGGTCTTAGATATTAGCTATTTGTGAGAGGAAACTGGTTTGTAACAATACTGCAAATAGAA ACCCCATTCTACTGAACATCCTAGTTTTAAACAGAAGAAAAACTGTAATCCTGGGGTTGGTATGTAGGAGGTCT AATGTCACCAATAAAAGTTTTGGCAGGAAGCTTGTTGCGGCATTGATCTAACCTTTTTCCCCCCCATTTCAGTTG CAGTTTTTGTAGAATGGCTTTTTCTTTTTCCTCTTAAGAGTTCTATTCTTCAGGTAGATAATTTTTCAAATGTGA ATTATCTTTTGTGTCTATATTGATAGCTCTTAAAGGAGTGAAAATCTAAAATAGTAAATTTCAATGTTAAGTGTC ATGCTTATTCTGTTAATGTAAACTTTTGAAGATCTTAAGTGTATTGCTCTTTCATCTTAAACACTTTCGAGGATT TGCAGTGCGTCTAGCACCTAGATTACAGCCAGGAACATTGGTTAAGAACTGTTGGAAACAAAACTAAAAGCAAAC TCAACATATGTGATGTTTATGGCCCTCAGATCCTTAGTATTGTGTGATTTTCCCCCCGTTAACATGTCTTTCTAAA CCTGTTCAGAATAATACTTATTTACGTGTGAAAGCAACATGGATGTGATTCCCAACACAGAATTTTCATGACCCT TTTATTGTATACAAATAAATACCATAACAGTTACTTGGTTAGACATCAAATCTGTGTGCATGACTATGTGCTTAT CCACTTAAGACAATAGGTAAAAGGGGATCTGAGAAATTATGTAATAGGGAGTGGGAATAAAACTACTTAATTCCT GTGGGCAGGTTATATTTTAAGTTCAAATGCATTGCTTTAACCTTTGGTTACTTTTATTCTGTTAAACAGAATTGA AGAAAGAGTATTATACCAGAGTGTAGTAGGCTAGGGTGATTGTAAGAACTCTGTAATAGAATGTCATTGTGGATG TTACCTTTTTCAGATCCAAGCATATAAAAAGCCTGTATATTTTTTTAAAAACACATCTTAACTCCACGCTTTACGA TATTATAAAAGTTGAATGGTTCCTCTTGGTAAGGATATTTGCTTACAAGTGCTAGGAAATAACTCACTGATACCT GCGTTAACATACTTTGTTTTGCCTAGAGAGGGGCAATAAAAATGAACCAAAGGATATTTCCAGAAAGGATTAAGA AAGCTGTTTAAGAAGGCCATGACTCTTTAGGTGTGTATGTGTACCTTTCAGCATCCTAGGAATTTTTATACTAAA AGCAAAATGTTTTTTCCAGTTAGTCTTCTTCAAGGAATTACTATTGTTCCTTTTGTCACAGGTAAAATCAGTGTT GGGAATTATAATTTGAGAAAAATATTACCCAGTAACATTGAATGTAGATGGCTAAACGATTCTTACTCAGTGTGA TGTATAATGATGCAACAGGGACCCTTGTAAATTGTCATACGCCAATAAAATGTCACAAGTAAT

1203/2682 FIGURE 1084

MGRSNSRSHSSRSKSRSQSSSRSRSRSHSRKKRYSSRSRSRTYSRSRSDRMYSRDYRRDYRNNRGMRRPYGYRG
RGRGYYQGGGGRYHRGGYRPVWNRRHSRSPRRGRSRSRSPKRRSVSSQRSRSRSRRSYRSSRSPRSSSSRSSPY
SKSPVSKRRGSQEKQTKKAEGEPQEESPLKSKSQEEPKDTFEHDPSESIDEFNKSSATSGDIWPGLSAYDNSPRS
PHSPSPIATPPSQSSSCSDAPMLSTVHSAKNTPSQHSHSIQHSPERSGSGSVGNGSSRYSPSQNSPIHHIPSRRS
PAKTIAPQNAPRDESRGRSSFYPDGGDQETAKTGKFLKRFTDEESRVFLLDRGNTRDKEASKEKGSEKGRAEGEW
EDQEALDYFSDKESGKQKFNDSEGDDTEETEDYRQFRKSVLADQGKSFATASHRNTEEEGLKYKSKVSLKGNRES
DGFREEKNYKLKETGYVVERPSTTKDKHKEEDKNSERITVKKETQSPEQVKSEKLKDLFDYSPPLHKNLDAREKS
TFREESPLRIKMIASDSHRPEVKLKMAPVPLDDSNRPASLTKDRLLASTLVHSVKKEQEFRSIFDHIKLPQASKS
TSESFIQHIVSLVHHVKEQYFKSAAMTLNERFTSYQKATEEHSTRQKSPEIHRRIDISPSTLRKHTRLAGEERVF
KEENQKGDKKLRCDSADLRHDIDRRKERSKERGDSKGSRESSGSRKQEKTPKDYKEYKSYKDDSKHKREQDHSR
SSSSSASPSSPSSREEKESKKEREEEFKTHHEMKEYSGFAGVSRPRGTFFRIRGRGRARGVFAGTNTGPNNSNTT
FQKRPKEEEWDPEYTPKSKKYFLHDDRDDGVDYWAKRGRGRGRGFFQRGRGRFNFKKSGSSPKWTHDKYQGDGIVED
EEETMENNEEKKDRRKEEKE

1204/2682 FIGURE 1085

ATGACCATGGAAACAGTTGAATCCCAGCATGATGGAAGTATAACAGCTTCTTTGACAGAGAGCAAGTCTGCTCAT GTGCAGACTCAGACTGGGCAAATTTCAATCCCTGCTTTAGCTCAGTGCAGTGAGCTGAGATCAGGCACCAGAAGA GGCTCCCCAGCTGTAACTCTAGTGCAGTTACCTTCGGGCCAAACTATACATGTCCAGGGAGTAATTCAGACACCA CAGCCATGGGTTATTCAGTCATCAGAAATACACACCGTTCAGGTAGCAGCAATTGCAGAGACAGATGAATCTGCA GAATCAGAAGGTGTAATTGATTCTCATAAACGTAGAGAAATCCTTTCACGAAGACCCTCTTATAGGAAAATACTG AATGAACTGTCCTCTGATGTGCCTGGTGTTCCCAAGATTGAAGAAGAGAGATCAGAGGAAGAAGAACACCACCT AGTATTGCTACCATGGCAGTACCAACTAGCATATATCAGACTAGCACGGGGCAATACATTGCTATAGCCCAAGGT GGAACAATCCAGATTTCTAACCCAGGATCTGATGGTGTTCAGGGACTGCAGGCATTAACAATGACAAATTCAGGA GCTCCTCCACCAGGTGCTACAATTGTACAGTACGCAGCACAATCAGCTGATGGCACACAGCAGTTCTTTGTCCCA GGCAGCCAGGTTGTTGTTCAAGCTGCCACTGGTGACATGCCAACTTACCAGATCCGAGCTCCTACTGCTTTTG ${\tt CCACAGGGAGTGGTGATGGCTGCATCGCCCGGAAGTTTGCACAGTCCCCAGCAGCTGGCAGAAGAAGCAACACGC}$ TGTCTTGAAAATCGTGTGGCTGGCTTGAAAACCAAAACAAGACTCTCATTGAGGAACTCAAGGCCCTCAAAGAT $\tt CTTTATTGCCATAAAGTAGAG\underline{TAA}CTGTCTTTGACTTGGACCTTGTTTACTCTAATCAAGGCAGGAGATGCAGCA$ GTCCTACTTATTGCCATGTGGACTTGTGGGAAGGACACGTGTGACCCTTAAGAATCCAGTTTGGATTAGTGTTTG AAATTGAATTGGGAATGTTGTTCCAGGATGTGGAATGCAGCGTGATCACACTTACCGAGCTTACTTGATCTGTT TGTCAATAGCATGCAAAAAATGCTTTGTTTGCCCTTTGCTTCTGCTTTTTTTCAGGGAAGCTGCCAAAGAATGTC GACGTCGAAAGAAAGAATATGTAAAATGCCTGGAGAGCCGAGTTGCAGTGCTGGAAGTCCAGAACAAGAAGCTTA TAGAGGAACTTGAAACCTTGAAAGACATTTGTTCTCCCAAAACTGATTACTAGAAATATTTAACTATGAACTGAT **TACAGA**

1205/2682 FIGURE 1086

MTMETVESQHDGSITASLTESKSAHVQTQTGQISIPALAQCSELRSGTRRGSPAVTLVQLPSGQTIHVQGVIQTP QPWVIQSSEIHTVQVAAIAETDESAESEGVIDSHKRREILSRRPSYRKILNELSSDVPGVPKIEEERSEEEGTPP SIATMAVPTSIYQTSTGQYIAIAQGGTIQISNPGSDGVQGLQALTMTNSGAPPPGATIVQYAAQSADGTQQFFVP GSQVVVQAATGDMPTYQIRAPTAALPQGVVMAASPGSLHSPQQLAEEATRKRELRLMKNREAARECRRKKKEYVK CLENRVAVLENQNKTLIEELKALKDLYCHKVE

1206/2682 FIGURE 1087

TTGTTTCTTCAGGCTCTTCTGGCAGTGATTCTGACAGTGAGGTTGACAAAAAGTTAAAGAGGAAAAAGCAAGTTG CTCCAGAAAAACCTGTAAAGAAACAAAAGACAGGTGAGACTTCGAGAGCCCTGTCATCTTCTAAACAGAGCAGCA GCAGCAGAGATGATAACATGTTTCAGATTGGGAAAATGAGGTACGTTAGTGTTCGCGATTTTAAAGGCAAAGTGC TAATTGATATTAGAGAATATTGGATGGATCCTGAAGGTGAAATGAAACCAGGAAGAAAAGGTATTTCTTTAAATC ${\tt CAGAACAATGGAGCCAGCTGAAGGAACAGATTTCTGACATTGATGATGCAGTAAGAAAACTG{\color{red}{TAA}}{\scriptsize AATTCGAGCC}$ ATATAAATAAAACCTGTACTGTTCTAGTTGTTTTAATCTGTCTTTTTACATTAGCTTTTGTTTTCTAAATGTTCT CCAAGCTATTGTATGTTTGGATTGCAGAAGAATTTGTAAGATGAATACTTTTTTTAATGTGCATTATTAAAAAT ATTGAGTGAAGCTAATTGTCAACTTTATTAAGGATTACTTTGTCTGCCCACCACCTAGTGTAAAAATAAAATCAAG TAATACAATCTTAACTGTTGTGGCCTTTTTTGATCATAAGAGTTGGTACTGTTTAAGGCCAAAAGTAACAGTTTT TATAGATCTTTTAGTTTCAACTCAGCTTTTACAATAAAAAGGATTTGTATTGCATTGAGTTTATAAACTTTTGGT TTGTGAACTTCATATTTGATCTTTTCTCTTCCAATCAAATGTCTAGGCTTGTTTGACTTCCACCCCCAATGGTTT TTCACTCTTTTTATTTACTTCATTTTCCTTTAATAACTTAATCTCTTCATGTTCAGTTTTTACTTCACTCTTTAT TCTTTTCTTTGATTATGGTATGCTTATTTGGAAAGTCAGTGAAACTGTCAAAATGTTATCTCAATAAGATACTTA TATGAGAACTACAATCACCGAATCTACTGTATTCAATATTAGCAGATCTAATTTGATAAACAACATGGCTTGTGT GAAAACTGAGCAGGTGTTTGTTTACCCATAGTGTTCTGTGTAGTTATTGCTTAGTCTGCAGAAAATAATGACTTA GATGAGATGTCTGACTTGCTTTCACTTATTAAACATGTTCACCATGGGATGATGTCTGTAACATCAGATATTGTT

1207/2682 FIGURE 1088

 ${\tt MPKSKELVSSGSSGSDSDSEVDKKLKRKKQVAPEKPVKKQKTGETSRALSSSKQSSSSRDDNMFQIGKMRYVSVRDFKGKVLIDIREYWMDPEGEMKPGRKGISLNPEQWSQLKEQISDIDDAVRKL}$

1208/2682 FIGURE 1089

1209/2682 FIGURE 1090

 ${\tt MSGRGKGGKGLGKGGAKRHRKVLRDNIQGITKPAIRRLARRGGVKRISGLIYEETRGVLKVFLENVIRDAVTYTE}\\ {\tt HAKRKTVTAMDVVYALKRQGRTLYGFGG}$

1210/2682 FIGURE 1091

ATGAGACTTCTCATCCTGGCCCTCCTTGGCATCTGCTCTCTCACTGCATACATTGTGGAAGGTGTAGGGAGTGAAGTCTCACCATAGGAGGAGCCTGTGTGAGCCTCACTACCCAGCGACTGCCAGTTAGCAGAATCAAGACCTACCCATCACGAAGGCTCCTTGAGAGCAGTAATTTTTATTACCAAACGTGGCCTAAAAGTCTGTGCTGATCCACAAGCCACGTGGGTGAGAGAGCGTGGTCAGGACAAGCAACACCAGAAATAACATGATCCAGACCAAGCCAACAGGAACCCAGCAATCGACCAATACAGCCTGACTGGCTAAG

FIGURE 1092

 ${\tt MRLLILALLGICSLTAYIVEGVGSEVSHRRTCVSLTTQRLPVSRIKTYTITEGSLRAVIFITKRGLKVCADPQATWRDVVRSMDRKSNTRNNMIQTKPTGTQQSTNTAVTLTG}$

FIGURE 1093A

ATGAGGAGGGACGAGACGCCAAAGCCATGCGGTCCCTGCAGCCGCGGATGGGGCCGGCTCGCCCCCGAG AGTCTGAGGAACGGCTACGTGAAGAGCTGCGTGAGCCCCTTGCGGCAGGACCCTCCGCGCGGCTTCTTCTTCCAC TGCCGGGCGCCTCTCGCTGGGCGACCTGGCTGCCTTTGTCCTCGCCCTGCTGCTGGGAGCGGAACCCGAGAGC TGGGCTGCCGGGGCCGCCTGCTGCAGCGTGTGTTCGCACAGCTTGAGCCCCCTCTTCAGCATC GCCTGTGCCTTCTTCCTCACCTGCTTCCTCACCCGGACCAAGCGGGGACCCGGCCCGGGCCGGAGCTGCGGC TCCTGGTGGCTGCTGCCCGCCTGCTGTTACCTGGGGGACTTCTTGGTGTGGCAGTGGTGGTCTTGGCCT TGGGGGGATGGCGACGCAGGGTCCGCGGCCCCGCACACGCCCCCGGAGGCGGCAGCGGGCAGGTTGCTGCTGGTG CTGAGCTGCGTAGGGCTGCTGCTGACGCTCGCGCACCCGCTGCGGCTCCGGCACTGCGTTCTGGTGCTGCTCTG GCCAGCTTCGTCTGGTGGGTCTCCTTCACCAGCCTCGGGTCGCTGCCCTCCGCCCTCAGGCCGCTGCTCTCCGGC $\tt CTGGTGGGGGGGGGTGGCTGCTGGCCCTGGGGTTGGATCACTTCTTCAAATCAGGGAAGCGCCTCTTCAT$ CCTCGACTGTCCAGTGCCGCCGAAGAAAAGTGCCTGTGATCCGACCCCGGAGGAGGTCCAGCTGCGTGTCGTTA GGAGAAACTGCAGCCAGTTACTATGGCAGTTGCAAAATATTCAGGAGACCGTCGTTGCCTTGTATTTCCAGAGAA CAGATGATTCTTTGGGATTGGGACTTAAAACAATGGTATAAGCCTCATTATCAAAATTCTGGAGGTGGAAATGGA GTCATTTCCTCTCTACGGAGTATTAGTAGCTTAATGGGTGCTTTCTCAGGTTCCTGTAGGCCAAAGATTAATCCT CTCACACCATTTCCTGGATTTTACCCCTGTTCTGAAATAGAGGGCCCAGCTGAGAAAAGGGGATAGAAAACTTAAC **AAGGGACTAAATAGGAATAGTTTGCCAACTCCACAGCTGAGGAGAAGCTCAGGAACTTCAGGATTGCTACCTGTT** GAACAGTCTTCAAGGTGGGATCGTAATAATGGCAAAAGACCTCACCAAGAATTTGGCATTTCAAGTCAAGGATGC TATCTAAATGGGCCTTTTAATTCAAATCTACTGACTATCCCGAAGCAAAGGTCATCTTCTGTATCACTGACTCAC CATGTAGGTCTCAGAAGAGCTGGTGTTTTGTCCAGTCTGAGTCCTGTGAATTCTTCCAACCATGGACCAGTGTCT ACTGGCCCTCTAACTAATCGATCACCCATAGAATTTCCTGATACTGCTGATTTTCTTAATAAGCCAAGCGTTATC TTGCAGAGATCTCTGGGCAATGCACCTAATACTCCAGATTTTTATCAGCAACTTAGAAATTCTGATAGCAATCTG TGTAACAGCTGTGGACATCAAATGCTGAAATATGTTTCAACATCTGAATCAGATGGTACAGATTGCTGCAGTGGA AAATCAGGTGAAGAAGAAACATTTTCTCGAAAGAATCATTCAAACTTATGGAAACTCAACAAGAAGAAGAACA GAGAAGAAAGACAGCAGAAAATTATTTCAGGAAGGTGATAAGTGGCTAACAGAAGAGGCACAGAGTGAACAGCAA <u>ACAAATATTGAACAGGAAGTATCACTGGACCTGATTTTAGTAGAAGAGTATGACTCATTAATAGAAAAGATGAGC</u> TATACCTTATTTCAAGACACTGGTTTATTGGAAATATTTAAAATTCCCACTCAACAATTTATGAACTATTTTCGT GCATTAGAAAATGGCTATCGAGACATTCCTTATCACAATCGTATACATGCCACAGATGTGCTACATGCAGTTTTGG TATCTGACAACACGGCCAGTTCCTGGCTTACAGCAGATCCACAATGGTTGTGGAACAGGAAATGAAACAGATTCT GATGGTAGAATTAACCATGGGCGAATTGCTTATATTTCTTCGAAGAGCTGCTCTAATCCTGATGAGAGTTATGGC ${\tt CCAGGGAGGACAAATGCATTTCTAGTGGCTACAAATGCCCCTCAGGCAGTTTTATACAATGACAGATCTGTTCTG}$ CATGTGGAATTCAAGCGCTTTCGTTTTTTAGTCATTGAAGCAATCCTTGCTACGGATCTTAAAAAAGCATTTTGAT TTTCTCGCAGAATTCAATGCCAAGGCCAAATGATGTAAATAGTAATGGCATAGAATGGAGTAATGAAAATGATCG ${\tt CCTCTTGGTATGCCAGGTGTGCATCAAACTGGCAGATATAAATGGCCCAGCAAAAGTTCGAGACTTGCATTTGAA}$ ATGGACAGAAGGCATTGTCAATGAATTTTATGAGCAGGGAGATGAAGAAGCAAATCTTGGTCTGCCCATCAGTCC ATTCATGGATCGTTCTTCTCCTCAACTAGCAAAACTCCAAGAATCTTTTATCACCCACATAGTGGGTCCCCTGTG TAACTCCTATGATGCTGCTGGTTTGCTACCAGGTCAGTGGTTAGAAGCAGAAGAGGATAATGATACTGAAAGTGG TGATGATGAAGACGGTGAAGAATTAGATACAGAAGAAGAAATGGAAAACAATCTAAATCCAAAACCACCAAG CGTAGAGGAAGAAAAAATGTAAAGCTGATGGGAATAAACTGCAGGTGGAGAATTCCTCCTTACCTCAAGCAGA TGAGATTCAGGTAATTGAAGAGGCAGATGAAGAGGGAATAGCGACAGTTTGAGTAAAAGAAAAGTCATATTGAAGA AGCCCAGAGGGTTGTGCCCAGGGGCAGAAATCATTGCCTAGTGTTCACCGGCTGACTCTCAACTGACCATTCCCA TGTGGACAGGCCTTAATACTGTGAGAGGATCCTTGCTCTGCTGGCAGTTTCCCACTCCTATGCACTTTCACAGGA

1213/2682 FIGURE 1093B

 $\tt CTGGTGTATGAATACTTTGTCATAATGCTGCTTTGCTGGGTAGTGAGCTCTTATTTTTCACTGGGGGTCAGCTAT$ AACTAAAAACTCAAGTGACATATTTCAGTTACCAAAGTGGCCAGGAACTTTTTGCTTTTATGAAAATAGATTCAT ATTGTATTTCCCAGTGTGTCTTTTATGTCTTTGAATGTTTTGGAGAAAAGTCTATGCCTGTCTAAAAATGAATCC AGTGTTGCCTTTCTGAGGGATTTCTGCTCAATGCAATACACTGTTCAGTGCTATTCTCCCAGCTAGGTTTATCCA TGAAGGACTGAGTGACCTTTGTTGTATTTAACAAAATCCAGGTGCATCAATTTCTGATGCTTTTTACTATTGTGT ATTATCTACTATGTGTTTTTTTTCTGCTGAGAGTATTCAGGTTTGCCATGGACATCAGAAGTTTGAATTCCAG TCTTATCTTATGTTCCATGGCTGAATTTTAAAGCTGTTTAGGTTTAACAATGAAGGGATTTATTCTTTAGTCAAA ATTGTTGTTTTTACTCTAGCTCAGGATTCGTATTTTTAAAGATTTAGTTAATATAAACACAGCACAGATTTGTCA AAAGGACACATACATTGAATAAATAATTGGAACATGTGGTTATCTTTAGATCCACATCTTAGCTGTCATTTGTTC ACTCTAAAACTGATGTTCATCTTTCTGTTAATTTCCCTCTGCCTAAAGACTACATGACAGAAATGACCTATCACT ACTTATTATTTCTGAAGCCTAACTGCAAGACTGATTTCTGAGAACAAGTAAAGAACTGGAATACTTATTTTCAT ATAAAAATCTAAATGTGTTAATAAATCATTTCATACAAAAGTACATTATTAAATAACCACATTATTAAAATAATT GCAAGAAAATGGACCATATTTACAATGTTTTGTAAACTTGCTAGTGTGTGGATATGTACCCTACTTGTGAAATAC ATTTGAAGATATAAAGAGCAGCCAAAATGATGGCAAAATGGTAGGCTAATATTTTCTATTATTATTGGAGAACAT ATCATATTTTGGAATCATGCAATTTTGCACACAGTGAAACCATTAATTTTCCAAGGTAATTCCTTTAGAATATGG TATTGGCATGCAGTTTCTTACTTATCTAGAATATTTGGCTTATCTGAAAGATATCAATTTAAGATCTCTGGAAGT GTGCTGAGTTCCTTGCTGCCACTTTTGTTACCATTGTCACACACTATGTGTAAACCAGTCCCACCACTTATTACT TTGGGTTTCTTTAGTTTATGTTGTTTTCTCAAAAGCAGCATTTTAAATTACGAATACTGGACTTATTGGATTTAA TTATAAATCCAATTACTACTGGAAACTCATTTTTACATAATATAGTCCTTAAATTATTTAACCCTTGCTAAGTAA TTGACATATGTAACAATAACTAGCCTAAAGAAACCCAAAAAAAGTATCTCTCCCGAGCTGAAACTTAAAAATTCG TAAGTGTAAGAAAGAATGTGAGAATATTATAAATGCACACTGTACCATTAGATGAAAATCTTACTTGAGAAATTGC CATAAGCCATATTACAGATCTTACTTTGATTGTTACTGAATCAGATTAATTTCTTGTTATAATAATTTTCATCAT AAATTTTCTATTTTAAAGCCGCTGGTACTAGAAATATTCTTTTAATGCTATATCTATGTACCTACTGACACATT TTTCTCCATAAAAGTACTTTTAAAAATTACTTCATGATTTG

FIGURE 1094

MRRDERDAKAMRSLQPPDGAGSPPESLRNGYVKSCVSPLRQDPPRGFFFHLCRFCNVELRPPPASPQQPRRCSPF
CRARLSLGDLAAFVLALLLGAEPESWAAGAAWLRTLLSVCSHSLSPLFSIACAFFFLTCFLTRTKRGPGPGRSCG
SWWLLALPACCYLGDFLVWQWWSWPWGDGDAGSAAPHTPPEAAAGRLLLVLSCVGLLLTLAHPLRLRHCVLVLLL
ASFVWWVSFTSLGSLPSALRPLLSGLVGGAGCLLALGLDHFFQIREAPLHPRLSSAAEEKVPVIRPRRRSSCVSL
GETAASYYGSCKIFRRPSLPCISREQMILWDWDLKQWYKPHYQNSGGGNGVDLSVLNEARNMVSDLLTDPSLPPQ
VISSLRSISSLMGAFSGSCRPKINPLTPFPGFYPCSEIEDPAEKGDRKLNKGLNRNSLPTPQLRRSSGTSGLLPV
EQSSRWDRNNGKRPHQEFGISSQGCYLNGPFNSNLLTIPKQRSSSVSLTHHVGLRRAGVLSSLSPVNSSNHGPVS
TGPLTNRSPIEFPDTADFLNKPSVILQRSLGNAPNTPDFYQQLRNSDSNLCNSCGHQMLKYVSTSESDGTDCCSG
KSGEEENIFSKESFKLMETQQEEETEKKDSRKLFQEGDKWLTEEAQSEQQTNIEQEVSLDLILVEEYDSLIEKMS
NWNFPIFELVEKMGEKSGRILSQVMYTLFQDTGLLEIFKIPTQQFMNYFRALENGYRDIPYHNRIHATDVLHAVW
YLTTRPVPGLQQIHNGCGTGNETDSDGRINHGRIAYISSKSCSNPDESYGCLSSNIPALELMALYVAAAMHDYDH
PGRTNAFLVATNAPQAVLYNDRSVLENHHAASAWNLYLSRPEYNFLLHLDHVEFKRFRFLVIEAILATDLKKHFD

1215/2682 FIGURE 1095

GTTCATTACTACAGGAAAAACTGTTCTCTTCTGTGGCACAGAGAACCCTGCTTCAAAGCAGAAGTAGCAGTTCCG GAGTCCAGCTGGCTAAAACTCATCCCAGAGGATAATGGCAACCCATGCCTTAGAAATCGCTGGGCTGTTTCTTGG TGGTGTTGGAATGGTGGCCACAGTGGCTGTCACTGTCATGCCTCAGTGGAGAGTGTCGGCCTTCATTGAAAACAA ${\tt CAAAATCTATGATTCCCTGCTGGCTCTTTCTCCGGACCTACAGGCAGCCAGAGGACTGATGTGTGCTGCTTCCGT}$ GATGTCCTTCTTGGCTTTCATGATGGCCATCCTTGGCATGAAATGCACCAGGTGCACGGGGGACAATGAGAAGGT GAAGGCTCACATTCTGCTGACGGCTGGAATCATCTTCATCATCACGGGCATGGTGGTGCTCATCCCTGTGAGCTG GGTTGCCAATGCCATCATCAGAGATTTCTATAACTCAATAGTGAATGTTGCCCAAAAACGTGAGCTTGGAGAAGC TCTCTACTTAGGATGGACCACGGCACTGGTGCTGATTGTTGGAGGAGCTCTGTTCTGCTGCGTTTTTTGTTGCAA CGAAAAGAGCAGTAGCTACAGATACTCGATACCTTCCCATCGCACAAACCCAAAAAAAGTTATCACACCGGAAAGAA GTCACCGAGCGTCTACTCCAGAAGTCAGTATGTGTAGTTTGTGTATGTTTTTTTAACTTTACTATAAAGCCATTTA CTTCAAAATGACATTGCTAAAGACTGCATTATTTTACTACTGTAATTTCTCCACGACATAGCATTATGTACATAG ACTGAATAAATAGAACTCAACTATTGCTTTTCAGGGAAATCATGGATAGGGTTGAAGAAGGTTACTATTAATTGT TTAAAAACAGCTTAGGGATTAATGTCCTCCATTTATAATGAAGATTAAAATGAAGGCTTTAATCAGCATTGTAAA GGAAATTGAATGGCTTTCTGATATGCTGTTTTTTAGCCTAGGAGTTAGAAATCCTAACTTCTTTATCCTCTTCTC CCAGAGGCTTTTTTTTTCTTGTGTATTAAATTAACATTTTTAAAAAGCAGATATTTTGTCAAGGGGCTTTGCATT CAAACTGCTTTTCCAGGGCTATACTCAGAAGAAAGATAAAAGTGTGATCTAAGAAAAAGTGATGGTTTTAGGAAA TCATTTGCTTACCAAAAAAACAACAACAAAAAAAGTTGTCCTTTGAGAACTTCACCTGCTCCTATGTGGGTACCT GAGTCAAAATTGTCATTTTTGTTCTGTGAAAAATAAATTTCCTTCTTGTACCATTTCTGTTTAGTTTTACTAAAA TCTGTAAATACTGTATTTTTCTGTTTATTCCAAATTTGATGAAACTGACAATCCAATTTGAAAGTTTGTGTCGAC GTCTGTCTAGCTTAAATGAATGTGTTCTATTTGCTTTATACATTTATATAAAAATTGTACATTTTTCTAATTA TTTGCAAAAAAAAAAAAAAAAAAAAAAAAAA

1216/2682 FIGURE 1096

MATHALEIAGLFLGGVGMVGTVAVTVMPQWRVSAFIENNIVVFENFWEGLWMNCVRQANIRMQCKIYDSLLALSP DLQAARGLMCAASVMSFLAFMMAILGMKCTRCTGDNEKVKAHILLTAGIIFIITGMVVLIPVSWVANAIIRDFYN SIVNVAQKRELGEALYLGWTTALVLIVGGALFCCVFCCNEKSSSYRYSIPSHRTTQKSYHTGKKSPSVYSRSQYV

1217/2682 FIGURE 1097

CCACGCGTCCGGTTATCAGCAGGATCCATGCCGCCAGAGTAAAGCTTTCTACCCTTTACTCCCTGCAAAGAAACA AGAGTGCTTATCCCAGCTAAGCTCCAGGGTTAAAACTCTATGCTGGTCATTCCCTTCAGGATTTGGCACTCACCA ACATACCCTTCTTCAAGTGAAAAGGCATCTCTTTTAATGGTCCTGACCTTTGGAATAGGAAGCATGTACCCTGG ACAGAGCACTTCAAACTAGAGGAACCATAAATCCATGGCTAACCTTGACAAATACACTGAAAACATTCAAGATGGG TAGCAACAGTACCAGCACTGCTGAGATTTACTGTAATGTCACTAATGTGAAATTTCAATACTCCCTCTATGCAAC CACCTATATCCTCATATTCATTCCTGGTCTTCTGGCTAACAGTGCAGCCTTGTGGGGTTCTGTGCCGCTTCATCAG CAAGAAAAATAAAGCCATCATTTTCATGATCAACCTCTCTGTGGCTGACCTTGCTCATGTATTATCTTTACCCCT CCGGATTTACTATTACATCAGCCACCACTGGCCTTTCCAGAGAGCCCTTTGCCTGCTCTGCTTCTACCTGAAGTA TCTCAACATGTATGCCAGCATTTGTTTCCTGACGTGCATCAGTCTTCAAAGGTGCTTTTTTCTCCTCAAGCCCTT CAGGGCCAGAGACTGGAAGCGTAGGTACGATGTGGGCATCAGTGCTGCCATCTGGATCGTTGTGGGGACTGCCTG TTTGCCATTTCCCATCCTGAGAAGCACAGACTTAAACAACAACAAGTCCTGCTTTGCTGATCTTGGATACAAGCA AATGAATGCAGTTGCGTCGGGATGATTACAGTTGCTGAGCTTGCAGGATTTGTGATCCCAGTGATCATCAT CGCATGGTGTACCTGGAAAACTACTATATCCTTGAGACAGCCACCAATGGCTTTCCAAGGGATCAGTGAGAGGCA GAAAGCACTGCGGATGGTGTTCATGTGTGCTGCAGTCTTCATCTGCTTCACTCCCTATCATATTAACTTTAT TTTTTACACCATGGTAAAGGAAACCATCATTAGCAGTTGTCCCGTTGTCCGAATCGCACTGTATTTCCACCCTTT TTGCCTGTGCCTTGCAAGTCTCTGCTGCCTTTTGGATCCAATTCTTTATTACTTTATGGCTTCAGAGTTTCGTGA CCAACTATCCCGCCATGGCAGTTCTGTGACCCGCTCCCGCCTCATGAGCAAGGAGAGTGGTTCATCAATGATTGG CTAAAATTAAGATATCTCTTTAATTACGCCTTTGTTTACCTACGTTCCTTGTCTTTTCCAAAGGCCAGAATTGT CAACCAATTTCTTTAATTGAACATTGTAAAAAACAGGAATAAGTACTTTTGTGTAATATTCACAGTCAACAGGGG TGTGATGGTGAAGGCAGAGTGTGAAAAACGTGAGAGAGAAGAGAAAAATAGATTTACCTGATT

1218/2682 FIGURE 1098

RNHKSMANLDKYTETFKMGSNSTSTAEIYCNVTNVKFQYSLYATTYILIFIPGLLANSAALWVLCRFISKKNKAI IFMINLSVADLAHVLSLPLRIYYYISHHWPFQRALCLLCFYLKYLNMYASICFLTCISLQRCFFLLKPFRARDWK RRYDVGISAAIWIVVGTACLPFPILRSTDLNNNKSCFADLGYKQMNAVALVGMITVAELAGFVIPVIIIAWCTWK TTISLRQPPMAFQGISERQKALRMVFMCAAVFFICFTPYHINFIFYTMVKETIISSCPVVRIALYFHPFCLCLAS LCCLLDPILYYFMASEFRDQLSRHGSSVTRSRLMSKESGSSMIG

FIGURE 1099

AGACTCTCCTGTCCCACAAAACTCCCAAGTCAGAGAAACAGAGACAAAAAAGGAAAAACCCAAGCCCGATGCATATG ACATGATGGTTCGCGAGCTTGGCTTTGAAATGAAGGCGCAGCCCTCTAACAGGATGAAGACGGAGGCAGAATTGG CAAAGGAAGAGCAGCACCTCAGGAAGCTGGAGGCTGAGAGACTTCGAAGAATGCTTGGAAAGGATGAGGATG AAAATGTTAAGAAACCAAAACATATGTCAGCAGATGATCTGAATGATGGCTTCGTGCTAGATAAAGATGACAGGC GTTTGCTTTCCTACAAAGATGGAAAGATGAATGTCGAGGAAGATGTCCAGGAAGAGCAAAGCAAGGAAGCCAGTG ACCCTGAGAGCAACGAGGAAGAAGGTGACAGTTCAGGCGGGGAGGACACAGAGGAGAGCGACAGCCCAGATAGCC ACTCGGACCTGGAATCCAACGTGGAGAGTGAGGAAGAAAACGAGAAGCCAGCAAAAGAGCAGAGGCAGACTCCTG GGAAAGGGTTGATAAGCGGCAAGGAAAGAGCTGGAAAAGCTACCAGAGACGAGCTGCCCTACACGTTCGCAGCCC ATCTTTGCCAGATGTTTCCTGAATCTGCAAGTGACGCTATCAAATTTGTTCTCCGAGATGCGATGCATGAGATGG AGTGCCCCATCCTGTCCCTCCAGGACGTGGTGAAGGGCCTGTTCGTGTGCTGCCTGTTCCTGGAGTATGTGGCTT GCCAAGGTTCCACTCTGGTGCACCCTTTCAGAGCGCTTGGGAAGAACTCGGAACTGCTCGTGGTGTCTGCTAGAG AGGATGTGGCCACGTGGCAGCAGAGCAGCCTCTCCCTCCGCTGGTCTCGAATTCCCGACCTCAGGTAATCCACCT TGATGAAATAGAATGAATCCTGAAATGCACCTCTGGGATCGGGAATGGTCTGTGTTATCAGCTGCGACTGGTT CACTGCGTCTGGACAAGCCTCATGGGGACTGGGGATTCTGGCCAGTGTAATTTCTGTCAACCACGGACGTTTGCC ΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑ

FIGURE 1100

AGAATGCCAATATGAAAAAGAGAAAGCAGAAAGAGAAGTAGCTGTGAGACAGCTTCAACAAAAACGAGATGATGT CTTAAACAAAGGATCAGCAACAAAAGCTCTGCTGGATGCTTCATCGCGTCACTGCACCTATTTAGAAAATGGGAT GCAGGATTCAAGGAAGAAATTAGACCAGATGAGAAGTCAATTTCAAGAAATACAGGATCAACTTACAGCTACTAT AAGATGTACTAAGGAGATGGATGGCGACACACAAAAGCTTGAAGTAGAACATGTGATGATGAGAAAAATTATTAA AAAACAGGATGACCAAATTGAGCGGCTTGAGAAAATCCTGCAGCATTCAAGTTTGATGCTGCAGGTGTTTGAGAG $\mathtt{C} \underline{\mathtt{TAG}}\mathtt{ATGAAGATATGGACATTTCTGGAATTAAGAGCCCCCTCTACATTGAGCACAAGACAGTGACGAATCCACAT$ TCTTCAGCCAGAAAGTCACCTCTGAGAGCCAAATGTCTGACTATAGAAAGGAGAGTCAAAGAATGATAACGACAT CTCAGGAAAATTGTGAAAATAATCAGCAGCCGGATGTGGATAACCCTTTCAAATTTCTCCTGGGGCCTCCAACCA CCCCCACTGGTGTTCTCCTGCTGACAGTGATTTCAATTTTTTCTGGGCTGGAGCTCCCTGATGGAGGGGCAGGCC ACCATCTTTGCTGTTTTTGCAACTTAGCCACTTCAGCCTTCAGTCTTTGGAGTGTCCAAGGAGACCAGGGGGTGA $\tt TGTGGACCCTCAGCATAGCACAGCTGCTCTATAAAGATGAGGCCAGACTGCTTTTTTGAGCACTTTCCCAATGCC$ ATTCCTCCTCACTGGGCAAAACCTCCAAACTGGGGTCTCCAGCCACCTCCTACAGGTGTGTTTGGGCCAGCAACA AGTTCATTCATACCTCCCTAGGGCAAAGCTTCCAAAGGGAGCGGTAGGCTGCCATCTTTGCTGTTTCACAGGCTT CACTGATGATAACTCCAGGTACTGGAAAATCTGAGGCTACTAGAGACTGGAGCGGGCCCTGGGCATACTGCAGCA GCCCTATGGAAAAGTGGCCAGACTGTTACCTGGGTTCCCATTCCTATATCTTCTCACTAGGCAAGTCTTGCAGGC CTGGGCCTCTACCTAACCCCCCCTACCAGAACTGTTGAGCCAGTAGCAACTCAGCCACTCCCTGGAGAGAGCCTC CAGGGGCAACTGAAAGCCTCTCTGCCACTGCTTCTGCAGTGGAACTGTCCTTGCTACCCTCAGACTGATGAAGGA GCTAACACCTTATCTACACCTTCAACAGCTTTAATTGACCAAAGCCCATCTCTCATGGGTTCTACACACTCCC CACTGCTCATGACAGGGAACCCCTGGATTGGCCCCCACAGCACTCCTCATCCTGATTGCTGATTGCAGTAA ATGTCCCTTCCTCTCTGCCTCAAAGTTAGGAAAGAAATATAAACACTGAGATTGCCCCAGAGCTGCAGTGGGCA GCCTAGGAGTGCCAAGCCATGACCTACAGCCAGCACTCAAGGGGGAGAGAAGCACATTTTCAGATCATTGAGAGG CCAAGTGCCACCTACTGGATCACATCCCAAAGCTTCAGCATCAAAAATACCCTACTAATATACTCCCCTCTGAAA CCAGAAATGAGAAGTCAGCTTCAAATAAAGACCCTGCACAAAGCCTCAGCCTGGTGAAAAACATCCGAAAATAAGT CTACGGACTGTACTCAATCTACACTGCAATTAAAGGAAAACCCATAGGTGGAAATGAGAAGAAACCAATGCAAGA ACTCCAGTAACTCAAATGGCCTCTGTGTCATATGTCCTTCTAACAACCACCAGTTCTCCAACAACAAGAGTTCTTA AGAATGGCAAAACCCAATCCAAGGAAAATAAGAATAACAGTAAAGTGTTACAGGAGCTGAAGGATAAAGTAGCTG GTATAATAAAAAAGAACCTAACCGATCTGAAAGCGCCGAAGAACACAATACAAGAATTCCACAATGCAATCACAA GTATTAACAGCAGAAAAAAAACCTGAGGAACGAATCTCAGAACTTGAAGATTGGTTCTCTAAAATAAGATGGAC ΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑ

1221/2682 FIGURE 1101

 ${\tt MLVNELNHSKEKECQYEKEKAEREVAVRQLQQKRDDVLNKGSATKALLDASSRHCTYLENGMQDSRKKLDQMRSQFQEIQDQLTATIRCTKEMDGDTQKLEVEHVMMRKIIKKQDDQIERLEKILQHSSLMLQVFES}$

1222/2682 FIGURE 1102A

GGCCGCGAGCGGGCGGCCGGCGGCAGCTGCGCAAAGTGCGGAGTGTGGAGCTGGACCAGCTGCCTGAG CAGCCGCTCTTCCTTGCCGCCTCACCGCCGGCCTCCTCGACTTCCCCGTCGCCGGAGCCCGCGGACGCAGCGGGG GAGTCGGTGGCGGCGCCGGACAGCGGCGCCCTCGAGTCCCGCAGCCGGAGCCCGGGGAGAAGCGGGCCCCGCC GCCGAGCCGTCTCCTGCAGCGGCCCCGCCGGTCGTGAGATGGAGAATAAAGAAACTCTCAAAAGGGTTGCACAAG ATGGATGATCGTCCAGAGGAACGAATGATCAGGGAGAAACTGAAGGCAACCTGTATGCCAGCCTGGAAGCACGAA TGGTTGGAAAGGAGAAATAGGCGAGGGCCTGTGGTGGTAAAACCAATCCCAGTTAAAGGAGATGGATCTGAAATG AATCACTTAGCAGCTGAGTCTCCAGGAGAGGTCCAGGCAAGTGCGGCTTCACCAGCTTCCAAAGGCCGACGCAGT CCTTCTCCTGGCAACTCCCCATCAGGTCGCACAGTGAAATCAGAATCTCCAGGAGTAAGGAGAAAAAAGAGTTTCC CCAGTGCCTTTTCAGAGTGGCAGAATCACACCACCCGAAGAGCCCCTTCACCAGATGGCTTCTCACCATATAGC TCTTTCCTGATTGGAGGAGACAGCCCAGACAATAAATACCGGGTGTTTATTGGGCCTCAGAACTGCAGCTGTGCA CGTGGAACATTCTGTATTCATCTGCTATTTGTGATGCTCCGGGTGTTTCAACTAGAACCTTCAGACCCAATGTTA TGGAGAAAACTTTAAAGAATTTTGAGGTTGAGAGTTTGTTCCAGAAATATCACAGTAAGCGTAGCTCAAGGATC AAAGCTCCATCTCGTAACACCATCCAGAAGTTTGTTTCACGCATGTCAAATTCTCATACATTGTCATCATAGT ACTTCTACATCTAGTTCAGAAAACAGCATAAAGGATGAAGAGGAACAGATGTGTCCTATTTGCTTGTTGGGCATG CTTGATGAAGAAGTCTTACAGTGTGTGAAGACGGCTGCAGGAACAAGCTGCACCACCACTGCATGTCAATTTGG GCAGAAGAGTGTAGAAGAAATAGAGAACCTTTAATATGTCCCCTTTGTAGATCTAAGTGGAGATCTCATGATTTC TACAGCCACGAGTTGTCAAGTCCTGTGGATTCCCCTTCTTCCCTCAGAGCTGCACAGCAGCAAACCGTACAGCAG CAGCCTTTGGCTGGATCACGAAGGAATCAAGAGAGCAATTTTAACCTTACTCATTATGGAACTCAGCAAATCCCT CCTGCTTACAAAGATTTAGCTGAGCCATGGATTCAGGTGTTTGGAATGGAACTCGTTGGCTGCTTATTTTCTAGA AACTGGAATGTGAGAGAGATGGCCCTCAGGCGTCTTTCCCATGATGTCAGTGGGGCCCTGCTGTTGGCAAATGGG GAGAGCACTGGAAATTCTGGGGGCAGCAGTGGAAGCAGCCCGAGTGGGGGAGCCACCAGTGGGTCTTCCCAGACC AGTATCTCAGGAGATGTGGTGGAGGCATGCTGCAGCGTTCTGTCAATGGTCTGTGCTGACCCTGTCTACAAAGTG TACGTTGCTGCTTTAAAAACATTGAGAGCCATGCTGGTATATACTCCTTGCCACAGTTTAGCGGAAAGAATCAAA CTTCAGAGACTTCTCCAGCCAGTTGTAGACACCATCCTAGTCAAATGTGCAGATGCCAATAGCCGCACAAGTCAG CTGTCCATATCAACACTGTTGGAACTGTGCAAAGGCCAAGCAGGAGAGTTGGCAGTTGGCAGAGAAATACTAAAA GCTGGATCCATTGGTATTGGTGGTGTTGATTATGTCTTAAATTGTATTCTTGGAAACCAAACTGAATCAAACAAT TGGCAAGAACTTCTTGGCCGCCTTTGTCTTATAGATAGACTGTTGTTGGAATTTCCTGCTGAATTTTATCCTCAT ATTGTCAGTACTGATGTTTCACAAGCTGAGCCTGTTGAAATCAGGTATAAGAAGCTGCTGTCCCTCTTAACCTTT GCTTTGCAGTCCATTAATAATTCCCACTCAATGGTTGGCAAACTTTCCAGAAGGATCTACTTGAGTTCTGCAAGA AGGATGCGTCGCCGTTTGATGGCTATTGCAGATGAGGTGGAAATTGCCGAAGCCATCCAGTTGGGCGTAGAAGAC ACTTTGGATGGTCAACAGGACAGCTTCTTGCAGGCATCTGTTCCCAACAACTATCTGGAAACCACAGAGAACAGT TCCCCTGAGTGCACAATCCATTTAGAGAAAACTGGAAAAGGATTATGTGCTACAAAATTGAGTGCCAGTTCAGAG GACATTTCTGAGAGACTGGCCAGCATTTCAGTAGGACCTTCTAGTTCAACTACTACTACTACTACAACAACAACAGA TTCCCAATTAATGTTTCCAGCCTTGTCAACCCCTTCTTCTTCTACCCCATCTGTACCAGCTGGCACTGCAACAGA TGTCTCTAAGCATAGACTTCAGGGATTCATTCCCTGCAGAATACCTTCTGCATCTCCTCAAACACAGCGCAAGTT TTCTCTACAATTCCACAGAAACTGTCCTGAAAACAAAGACTCAGATAAACTTTCCCCAGTCTTTACTCAGTCAAG ACCCTTGCCCTCCAGTAACATACACAGGCCAAAGCCATCTCGACCTACCCCAGGTAATACAAGTAAACAGGGAGA TCCCTCAAAAAATAGCATGACACTTGATCTGAACAGTAGTTCCAAATGTGATGACAGCTTTGGCTGTAGCAGCAA TAGTAGTAATGCTGTTATACCCAGTGACGAGACAGTGTTCACCCCAGTAGAGGAGAAATGCAGATTAGATGTCAA TACAGAGCTCAACTCCAGTATTGAGGACCTTCTTGAAGCATCTATGCCTTCAAGTGATACAACAGTAACTTTTAA GTCAGAAGTTGCTGTCCTGTCTCCTGAAAAGGCTGAAAATGATGATACCTACAAAGATGATGTGAATCATAATCA AAAGTGCAAAGAAGAAGAAGCTGAAGAAGAAGAAGCTTTAGCAATTGCCATGGCAATGTCAGCGTCTCAGGA

1223/2682 FIGURE 1102B

TGCCCTCCCCATAGTTCCTCAGCTGCAGGTTGAAAATGGAGAAGATATCATCATTATTCAACAGGATACACCAGA GACTCTACCAGGACATACCAAAGCAAAACAACCGTATAGAGAAGACACTGAATGGCTGAAAGGTCAACAGATAGG ${\tt CCTTGGAGCATTTTCTTGTTATCAGGCTCAAGATGTGGGAACTGGAACTTTAATGGCTGTTAAACAGGTGAC}$ TTATGTCAGAAACACATCTTCTGAGCAAGAAGAAGTAGTAGAAGCACTAAGAAGAAGAAGAATAAGAATGATGAGCCA TCTGAATCATCCAAACATCATTAGGATGTTGGGAGCCACGTGTGAGAAGAGCAATTACAATCTCTTCATTGAATG GATGGCAGGGGGATCGGTGGCTCATTTGCTGAGTAAATATGGAGCCTTCAAAGAATCAGTAGTTATTAACTACAC TGAACAGTTACTCCGTGGCCTTTCGTATCTCCATGAAAACCAAATCATTCACAGAGATGTCAAAGGTGCCAATTT GCTAATTGACAGCACTGGTCAGAGACTAAGAATTGCAGATTTTGGAGCTGCAGCCAGGTTGGCATCAAAAGGAAC TGGTGCAGGAGAGTTTCAGGGACAATTACTGGGGACAATTGCATTTATGGCACCTGAGGTACTAAGAGGTCAACA GTATGGAAGGAGCTGTGATGTATGGAGTGTTGGCTGTGCTATTATAGAAATGGCTTGTGCAAAACCACCATGGAA TGCAGAAAAACACTCCAATCATCTTGCTTTGATATTTAAGATTGCTAGTGCAACTACTGCTCCATCGATCCCTTC ACATTTGTCTCCTGGTTTACGAGATGTGGCTCTTCGTTGTTTAGAACTTCAACCTCAGGACAGACCTCCATCAAG AGAGCTACTGAAGCATCCAGTCTTTCGTACTACATGGTAGCCAATTATGCAGATCÁACTACAGTAGAAACAGGAT GCTCAACAAGAGAAAAAAACTTGTGGGGAACCACATTGATATTCTACTGGCCATGATGCCACTGAACAGCTATG AACGAGGCCAGTGGGGAACCCTTACCTAAGTATGTGATTGACAAATCATGATCTGTACCTAAGCTCAGTATGCAA AAGCCCAAACTAGTGCAGAAACTGTAAACTGTGCCTTTCAAAGAACTGGCCCTAGGTGAACAGGAAAAACAATGAA GTTTGCATGACTAAATTGCAGAAGCATAATTTTATTTTTTTGGAGCACTTTTTCAGCAATATTAGCGGCTGAGGG GCTCAGGATCTATTTTAATATTTCAATTATTCTTCCATTTCATATAGTGATCACAAGCAGGGGGTTCTGCAATTC CGTTCAAATTTTTTGTCACTGGCTATAAAATCAGTATCTGCCTCTTTTAGGTCAGAGTATGCTATGAGTAGCAAT ACATACATATTTTTTAAAAGTTGATACTTCTTTATGACCCACAGTTGACCTTTATTTTCTTAAATACCAGGGCA ATGAAGTAGAGTTCATTAAATATCTTGCTATTGTCAGAGTTTTTAAAATATAGACTTAATTTTGTTTTTTAAAT TGGAATACAATAAAGTACTACCTACATTTGAGTCAGTCACCACTCTTATTGTGCAGGTTAAGTACAAGTTAACTA TTCACTACTGGTAATAACATAGAGCTGCCATTTTCCTTTTACCATGCATCATCTCTTTACAGTAGGCCTGGCAGA TCATTTTTAAAAAGATTATTCAACTACCAATCAGTAATGTTTTTAAACAGTACATTTGCTTTGAACTTGGAAAA TGTGTTCAGAAAGAAAATGGAATTGAATTTCATTTATACACTAATTCCTTGGATTTTGCACAGTTACCTAACGG GTGAGTCTTTTAAATCAAGTACTGATTAACTATTAAGTACAACTTTGAGATTTTAGTTTTAACTCTTCAGAAGCC GTACAACACAAATTGGAAGTAAAATAAGTTACAAGATAAGTTTACAGGGATATATTGCTTACAATTTTTAAAAGG CAGTTTGTTTTTATGTGAATATGTTTCTTAGTGAAATTTTACATTCCTTTGTTTTTGGAAGATTGGCGATATTTG TTTTTATTTTTTTTGACTACTTAGAATTTTCACAATTCTAATAAGATTGTTTCCAAGTCTCTCATGTGCAAGCTT TAAAGGATGCACTCTTGCCATTTTATGTACTGGAAGATCATTGGTCAGATGAATACTGTGTCTGACAAAAATGTA AACTGTATAAACTGAGGAACCTCAGCTAATCAGTATTACTTTGTAGATCACCATGCCCACCACATTTCAAACTCA TTTTGTTTTTTGTTTTCAATGCAAATGTGATGTAATATTCTTATTTTCTTTGGATCAAAGCTGGACTGGA **AATTGTATCGTGTAATTATTTTTGTGTTCTTAATGTTATTTGGTACTCAAGTTGTAAATAACGTCTACTACTGTT** TATTCCAGTTTCTACTACCTCAGGTGTCCTATAGATTTTTCTTCTACCAAAGTTCACTTTCACAATGAAATTATA TTTGCTGTGTGACTATGATTCCTAAGATTTCCAGGGCTTAAGGGCTAACTTCTATTAGCACCTTACTGTGTAAGC AAATGTTACAAAAAAGACAAGAAAAAATCTCTGGGTTAAGAAAATTTGGCTTAAATGTATCCTTTGTTATTTT **AAATATATTGAGATATTTTAATTAAAATTTTTACCCCATTGAACCGATTTTATAGTATTTTGTACCTATTTTTGGTG**

1224/2682 FIGURE 1103

MAAAAGNRASSSGFPGARATSPEAGGGGGALKASSARAAAAGLLREAGSGGRERADWRRRQLRKVRSVELDQLPE OPLFLAASPPASSTSPSPEPADAAGSGTGFQPVAVPPPHGAASRRGAHLTESVAAPDSGASSPAAAEPGEKRAPA AEPSPAAAPAGREMENKETLKGLHKMDDRPEERMIREKLKATCMPAWKHEWLERRNRRGPVVVKPIPVKGDGSEM NHLAAESPGEVQASAASPASKGRRSPSPGNSPSGRTVKSESPGVRRKRVSPVPFQSGRITPPRRAPSPDGFSPYS PEETNRRVNKVMRARLYLLQQIGPNSFLIGGDSPDNKYRVFIGPQNCSCARGTFCIHLLFVMLRVFQLEPSDPML WRKTLKNFEVESLFQKYHSKRSSRIKAPSRNTIQKFVSRMSNSHTLSSSSTSTSSSENSIKDEEEQMCPICLLGM LDEESLTVCEDGCRNKLHHHCMSIWAEECRRNREPLICPLCRSKWRSHDFYSHELSSPVDSPSSLRAAQQQTVQQ QPLAGSRRNQESNFNLTHYGTQQIPPAYKDLAEPWIQVFGMELVGCLFSRNWNVREMALRRLSHDVSGALLLANG ESTGNSGGSSGSSPSGGATSGSSQTSISGDVVEACCSVLSMVCADPVYKVYVAALKTLRAMLVYTPCHSLAERIK LQRLLQPVVDTILVKCADANSRTSQLSISTLLELCKGQAGELAVGREILKAGSIGIGGVDYVLNCILGNQTESNN WQELLGRLCLIDRLLLEFPAEFYPHIVSTDVSQAEPVEIRYKKLLSLLTFALQSINNSHSMVGKLSRRIYLSSAR MVTTVPHVFSKLLEMLSVSSSTHFTRMRRRLMAIADEVEIAEAIQLGVEDTLDGQQDSFLQASVPNNYLETTENS SPECTIHLEKTGKGLCATKLSASSEDISERLASISVGPSSSTTNYYYNNRATKANGSNKRQTPQSVFELLSFISS FPINVSSLVNPFFFYPICTSWHCNRCLKHRLQGFIPCRIPSASPQTQRKFSLQFHRNCPENKDSDKLSPVFTQSR PLPSSNIHRPKPSRPTPGNTSKQGDPSKNSMTLDLNSSSKCDDSFGCSSNSSNAVIPSDETVFTPVEEKCRLDVN ${\tt TELNSSIEDLLEASMPSSDTTVTFKSEVAVLSPEKAENDDTYKDDVNHNQKCKEKMEAEEEEALAIAMAMSASQD}$ ALPIVPQLQVENGEDIIIIQQDTPETLPGHTKAKQPYREDTEWLKGQQIGLGAFSSCYQAQDVGTGTLMAVKQVT YVRNTSSEQEEVVEALREEIRMMSHLNHPNIIRMLGATCEKSNYNLFIEWMAGGSVAHLLSKYGAFKESVVINYT EQLLRGLSYLHENQIIHRDVKGANLLIDSTGQRLRIADFGAAARLASKGTGAGEFQGQLLGTIAFMAPEVLRGQQ YGRSCDVWSVGCAIIEMACAKPPWNAEKHSNHLALIFKIASATTAPSIPSHLSPGLRDVALRCLELQPQDRPPSR ELLKHPVFRTTW

1225/2682 FIGURE 1104A

GTTTAGTGTTAACCTCAGCTACACTGAAGGAATAGACCTTAGTCCTCACAAGTATAAGTTCTAGCTTGGAAGCCT GGGTTCTGCAGTAGCTGTGGAACTTAAGCCTCTGAGCTCAGGGATGCAGAGGCATTGAGTTACTACCAAGGGCCT GATCTTTCTTTAGCAGGCATCTGTGTTAATTGTTTCAAAAGGTGGTGATCAGTTTTACAGCCTATTATAAAGGA GGGAAGGAGTTGGCACTTACACTCTGACTTTTGATTCAGTCGTCCTTCTTGAGCCATTTTTTGCAGGGGATCAGTT TGGAGTGGGCGTTAACAATGTTATTCTTTTTTTCTTCTCCAGAACACCTTCCACCATGACCACCTCAGCAAGTTC CCACTTAAATAAAGGCATCAAGCAGGTGTACATGTCCCTGCCTCAGGGTGAGAAAGTCCAGGCCATGTATATCTG GATCGATGGTACTGGAGAAGGACTGCGCTGCAAGACCCGGACCCTGGACAGTGAGCCCAAGTGTGTGGAAGAGTT GCCTGAGTGGAATTTCGATGGCTCTAGTACTTTACAGTCTGAGGGTTCCAACAGTGACATGTATCTCGTGCCTGC TGCCATGTTTCGGGACCCCTTCCGTAAGGACCCTAACAAGCTGGTGTTATGTGAAGTTTTCAAGTACAATCGAAG CATTCTGAAATCAGCATTGGGAAGACTAGGCAATTTCAGCACTATTTTAAGAATCTGAGTGATTCTTTTCCCTGA ATGTAAACCAATGGACAAATGTTTCTCAAAAATTATAGAATGGCTCCAAGTGCCTGAGAAATGAAGAATAAATCT GACAACCAGAAGCAGCTGTCTTGTGAATAGAGGGTTAAGTGCCTGGCATTTGGTGCTTGGGAGGTGGCCAGAATG CAGATAAGGTGAAAGTTGCCCTGTTCTAAATCCACTCCCATGTGACTTGGTTGTAACTGAGTTTAGTTAAAACTG AAGTCTTTCAGAGTCTTCCTACAGATGTACAATTAACAGCTTCTCTCATTTTTCTGACTCGGTGATCCCAAGAAG GCCTATACTGGGTCAGTTCATACCATAGTGCACACCTCAGTTGTATAGAATCCAAGGACTATTCTCCCATCAGCA TCGGTATTCAGCATCTATGTCTTTAGATCCCTGATGGCGTATTATTGACTCTTTTTTCTAGAGACCAATTTGAGG CACACCTGTAAACGGATAATGGACATGGTGAGCAACCAGCACCCCTGGTTTGGCATGGAGCAGGAGTATACCCTC ATGGGGACAGATGGGCACCCCTTTGGTTGGCCTTCCAACGGCTTCCCAGGGCCCCAGGGTAAGTCTCCTTGGGTT AGAGGTGAAATTCCCAGAAGTGTCTAACTGTGCAGGAATGCCCCTTCCCAGGGATGGGAATGACTTTCAGAATCA AGAAGCAAAATAATACAGTAAAGGCGAAACAGCCCTCACATCACCAAAGTCCAAAAATGGATATGAATATAAA GTAAGGTTTTAGGGGGAACGTTTGGCCCCACTGAAGCTGTGAAGAGAACTCCCCTATTGCCCCTCCCCTGC GGATTCTCTGGATTCTTGACTCTTAGTGTTTTGTCCTGATGCTTCTGTAGGTCCATATTACTGTGGTGTGGGAG CAGACAGAGCCTATGGCAGGGACATCGTGGAGGCCCATTACCGGGCCTGCTTGTATGCTGGAGTCAAGATTGCGG GTGAGAAGAGAACAGGTTTAGGAGATTCTGAGTTGGAGTGAGCAGTTAGCTTTGTTTTAATGGCCAAGCTTCTCG TTTCTAGTGGGAATTTCAGATTGGACCTTGTGAAGGAATCAGCATGGGAGATCATCTCTGGGTGGCCCGTTTCAT CTTGCATCGTGTGTGAAGACTTTGGAGTGATAGCAACCTTTGATCCTAAGCCCATTCCTGGGAACTGGAATGG TGCAGGCTGCCATACCAACTTCAGCACCAAGGCCATGCGGGAGGAGAATGGTCTGAAGTGAGTACCTTCTGCTGG GGCCATCTTTAATCTCCTGTGGCAGAAAACTTGGGAGGAGACTTAGCAATCTCTCAGCAAAGTCTCCTTTGCAGG ATGACTTGCAAATATTTGCCAAAGATGAGTAAACTTGACTTCTCAGTCTGGACGTACTTTAGGTGTTGACACTTG CCTTCACATTCTCCATTTTGTTCCTATTTGAAAAATACCAAATAATACTTCTGATTCACAGTGATAAATATTTG TCATGGTGACAGGGAAAAGTTGACAAATTCATGCATTTGAAAATCTTTTAGAACTAAATTAGTAACAATACAGGC ACTGCTTGTCGGGCACTGTTCTCACCACTGAGACACACAGGTAAGAAGATGCAGCCACTGCCCTCATGAAGTATT TGTTCTACTGGTATCATATTTTGGTGCACTTCATTCTTGGCTCCATACCTGGAGACAAGGTTGGACTGCCATCTT TGATCCCAAGGGAGGCCTGGACAATGCCCGACGTCTAACTGGATTCCATGAAACCTCCAACATCAACGACTTTTC TGCTGGTGTAGCCAATCGTAGCGCCAGCATACGCATTCCCCGGACTGTTGGCCAGGAGAAGAAGAGGGTTACTTTGA AGATCGTCGCCCCTCTGCCAACTGCGACCCCTTTTCGGTGACAGAAGCCCTCATCCGCACGTGTCTTCTCAATGA AACCGGCGATGAGCCCTTCCAGTACAAAAATTAAGTGGACTAGACCTCCAGCTGTTGAGCCCCTCCTAGTTCTTC ATCCCACTCCAACTCTTCCCCCTCTCCCAGTTGTCCCGATTGTAACTCAAAGGGTGGAATATCAAGGTCGTTTTT

1226/2682 FIGURE 1104B

CACTGCTTCCATTTAATGGGGTGCACCTGTCCAATAGGCGTAGCTATCCGGACAGAGCACGTTTGCAGAAGGGGG TCTCTTCCAGGTAGCTGAAAGGGGAAGACCTGACGTACTCTGGTTAGGTTAGGACTTGCCCTCGTGGTGGAA ACTTTTCTTAAAAAGTTATAACCAACTTTTCTATTAAAAGTGGGAATTAGGAGAGAAGGTAGGGGTTGGGAATCA GAGAGAATGGCTTTGGTCTCTTGCTTGTGGGACTAGCCTGGCTTGGGACTAAATGCCCTGCTCTGAACACGAAGC TTAGTATAAACTGATGGATATCCCTACCTTGAAAGAAGAAAAGGTTCTTACTGCTTGGTCCTTGATTTATCACAC TTGCTAAAGGAAAAAACCATCCAGGTCACGGGCACCAAATTTGAGACAAATAGTCGGATTAGAAATAAAGCATC TCATTTTGAGTAGAGAGCAAGGGAAGTGGTTCTTAGATGGTGATCTGGGATTAGGCCCTCAAGACCCTTTTGGGT TTCTGCCCTGCCCACCCTCTGGAGAAGGTGGGCACTGGATTAGTTAACAGACACACGTTACTAGCAGTCACTTG ATCTCCGTGGCTTTGGTTTAAAAGACACACTTGTCCACATAGGTTTAGAGATAAGAGTTGGCTGGTCAACTTGAG CATGTTACTGACAGAGGGGGTATTGGGGTTATTTTCTGGTAGGAATAGCATGTCACTAAAGCAGGCCTTTTGATA TTAAATTTTTTAAAAAGCAAAATTATAGAAGTTTAGATTTTAATCAAATTTGTAGGGTTTCTAGGTAATTTTTAC AGAATTGCTTGTTTGCTTCAACTGTCTCCTACCTCTGCTCTTGGAGGAGATGGGGACAGGGCTGGAGTCAAAACA AAAAAAAAAA

1227/2682 FIGURE 1105

 ${\tt MTTSASSHLNKGIKQVYMSLPQGEKVQAMYIWIDGTGEGLRCKTRTLDSEPKCVEELPEWNFDGSSTLQSEGSNSDMYLVPAAMFRDPFRKDPNKLVLCEVFKYNRRPAGVL}$

1228/2682 FIGURE 1106

GCCACAGTGCTCCGGATCCTCCAATCTTCGCTCCTCCAATCTCCGCTCCTCCACCCAGTTCAGGAACCCGCGACC $\tt TTGTGCGCGCTGTTGGTGCTGCTGCTGCTGACGCAGCCCAGCGCCCATCGCCAGCGCTGGTCCTGCCGCTGCT$ GTGTTGAGAGAGCTGCGTTGCGTTTGTTTACAGACCACGCAAGGAGTTCATCCCAAAATGATCAGTAATCTGCAA GATCCAGAAGCCCCTTTTCTAAAGAAAGTCATCCAGAAAATTTTGGACGGTGGAAACAAGGAAAAC<u>TGA</u>TTAAGA GAAATGAGCACGCATGGAAAAGTTTCCCAGTCTTCAGCAGAGAAGTTTTCTGGAGGTCTCTGAACCCAGGGAAGA CAAGAAGGAAAGATTTTGTTTGTTTGTTTATTTGTTTTTCCAGTAGTTAGCTTTCTTCCTGGATTCCTCACTT TGAAGAGTGTGAGGAAAACCTATGTTTGCCGCTTAAGCTTTCAGCTCAGCTAATGAAGTGTTTAGCATAGTACCT CTGCTATTTGCTGTTATTTATCTGCTATGCTATTGAAGTTTTGGCAATTGACTATAGTGTGAGCCAGGAATCAC TGGCTGTTAATCTTTCAAAGTGTCTTGAATTGTAGGTGACTATTATATTTCCAAGAAATATTCCTTAAGATATTA ACTGAGAAGGCTGTGGATTTAATGTGGAAATGATGTTTCATAAGAATTCTGTTGATGGAAATACACTGTTATCTT CACTTTTATAAGAAATAGGAAATATTTTAATGTTTCTTGGGGAATATGTTAGAGAATTTCCTTACTCTTGATTGT GGGATACTATTTAATTATTTCACTTTAGAAAGCTGAGTGTTTCACACCTTATCTATGTAGAATATATTTCCTTAT TCAGAATTTCTAAAAGTTTAAGTTCTATGAGGGCTAATATCTTATCTTCCTATAATTTTAGACATTCTTTATCTT TAGTTTATATAGAAATGTATTCTTTTAGTTTTTAAAGTAAAGGCAAACTTAACAATGACTTGTACTCTGAAAGTT TTGGAAACGTATTCAAACAATTTGAATATAAATTTATCATTTAGTTATAAAAATATATAGCGACATCCTCGAGGC

1229/2682 FIGURE 1107

 ${\tt MSLLSSRAARVPGPSSSLCALLVLLLLLTQPGPIASAGPAAAVLRELRCVCLQTTQGVHPKMISNLQVFAIGPQC} \\ {\tt SKVEVVASLKNGKEICLDPEAPFLKKVIQKILDGGNKEN}$

FIGURE 1108

GTTTTCATTTCTAAATGCTAATCCTTTTTCTTTCTTCCTGTCTATGAGTAGGAACTCTCTCCCATCCCTGTAGA ATCTCTTGGACATGTTTATCTCATGCTTATGGGGTCCCCATTTCTTGGAGTGGGATTGACATTGGTGGATTCTGC TTCAGTGTATCCTTCTTGCGGTCTTATTTGCATGCATGAGTCAACTGTGTGCATCCCATTGTGCTTTCCCCAGGC CAGTCTCTCATGCCCATTCCATTTCCCCTGCCCTATAGGCCTCCTTTCATGTACTCTGCCCAACGGTTTTGGGGG ACAATCTGGGCCAGAAGGGGAGCGCAGCTTGGCACCCCCTGATGCCAGCATCCTCATCAGCAATGTGTGCAGCAT CGGGGACCATGTGGCCCAGGAGCTTTTTCAGGGCTCAGATTTGGGCATGGCAGAAGAGGCCAGAGAGGCCTGGGGA GAAAGCCGGCCAGCACAGCCCCCTGCGAGAGGAGCATGTGACCTGCGTACAGAGCATCTTGGACGAATTCCTTCA AACGTATGGCAGCCTCATACCCCTCAGCACTGATGAGGTAGTAGAGAAGCTGGAGGACATTTTCCAGCAGGAGTT GTGCCAAATCCTTGGAAGCTGATGGGAGAGTCTTTACCTGGGACCCTGAAATGTTCTACCTGAGTAGTCATGTTT ATCTTTCTGGGGAGTGGGCCTTTCGCAGGTCCTCAGAAGGACCCATCATGAGCCAGAAAAAAGGGAGTCAGTTAG AATTTGTATTCCAGGGAGTAGTAGGTATTTCTGTGTGCCCCAGCTGCATCATCTTTTGTGTGACTCCACCCTTGG CCTACTCAGGAAGGGCCTGGTGTTGCAGCTGATCCAGTCTTACCAGCGGATGCCAGGCAATGCCATGGTGAGGGG TGACCAGGTGAGAAAGGGTAGAGAAACAGGCCTGAGAGGGGATTCAGGGAGCAGGGTGTCTGGGGCCCTCTGCAT GGGGGAGCCCTGTACCCATGCCGCACCCTCCATGGCAAGCTGCCTCCCATCTTCTCCCCAGGTGATGAACATGTA TGGAGACCTGGTCATGGACACAGTCCCTGAAAAGGTAGGCCCAACCAGATAGGTCAGTACCCAGAGGAACTTCTG CAGTTTTAAGCAGCTTTTTAAGCTCCTTTCATCTCTTTCATTTTACACAGAGAGGGTCTCTGTTTCAGGGAGAGA GGTGGTAGTGGTATTAATTTCAAATCCGTAATCTTGGGCTCTGGATTTATCAGTTGTTTTCCTTTCTGCC AGTATTTAGTGTTTTTCGCTATGGCCAGCCCCAAGGATTGGGATGGGTTCCTATTGTAACTATTGTAAAACAAGA TTT

1231/2682 FIGURE 1109

MSRNSLSIPVESLGHVYLMLMGSPFLGVGLTLVDSASVYPSCGLICMHESTVCIPLCFPQASLSCPFHFPCPIGL LSCTLPNGFGGQSGPEGERSLAPPDASILISNVCSIGDHVAQELFQGSDLGMAEEAERPGEKAGQHSPLREEHVT CVQSILDEFLQTYGSLIPLSTDEVVEKLEDIFQQEFSTPSR

1232/2682 FIGURE 1110

CCCACGCGTCCGCGGACGCGTGGGCGGACGCGTGGGCGGGAAGATGCCGGGTTCAAAACCGTGGAACCTCT GGAGTATTACAGGAGATTTCTGAAAGAGAACTGCCGTCCTGATGGAAGAGAACTTGGTGAATTCAGAACCACAAC TGTCAACATCGGTTCAATTAGTACCGCAGATGGTTCTGCTTTAGTGAAGTTGGGAAATACTACAGTAATCTGTGG AGTTAAAGCAGAATTTGCAGCACCATCAACAGATGCCCCTGATAAAGGATACGTTGTTCCTAATGTGGATCTACC ACCCCTGTGTTCATCGAGATTCCGGTCTGGACCTCCTGGAGAGAGGGCCCAAGTGGCTAGCCAGTTCATTGCAGA TGTCATTGAAAATTCACAGATAATTCAGAAAGAGGACTTATGCATTTCTCCAGGAAAGCTTGTCTGGGTTCTATA CTGTGATCTCATTTGCCTCGACTACGATGGAAACATTTTGGATGCCTGCACATTTGCTTTGCTAGCGGCTTTAAA AAATGTACAGTTGCCTGAAGTTACTATAAATGAAGAAACTGCTTTAGCAGAAGTTAATTTAAAGAAGAAAAGTTA ·TTTGAATATTAGAACTCATCCAGTTGCAACTTCCTTTGCTGTGTTTGATGACACTTTGCTTATAGTTGACCCTAC TGGAGAGGAGGAACATCTGGCAACAGGAACCTTAACAATAGTAATGGATGAGGAAGGCAAACTCTGTTGTCTTCA CAAACCAGGTGGAAGTGGGCTAACTGGAGCTAAACTTCAGGACTGTATGAGCCGAGCAGTTACAAGACACAAAGA AGTTAAAAAACTGATGGATGAAGTAATTAAGAGTATGAAACCCAAA<u>TAA</u>ACAGCCACCACATTTTCAAAACAGAT AAAAAAAAGGGCGGCCGCCCTTTTTTTTTTTTTTAAATATATACACACAAAACTTAGTTCAGCAAGGCTTCAT GATATACACCAATTCCAAAATAAAACAATCAAATGGTCCAGGTGTAGAATGCCAGATTCCTTTTATCATCTGCGA GGAAAAGAGAAGCAGGATGAGGAAGAGTGAGGGAAGGCGGGGACAGGCTCTGCCCAGAAGAGCTGCCGCCTCCTG CTGAAAGGCCCAAGGCTGTCACCAGCTCCCGGAAGAGAGGGGGGCAGTCTTGTTTTTGTCGTGGGAAGGGGTTTG GGTGGAGAAAAAGATTACAGGCACATCACCACAGGGGACCAGAAGTGGAGAGAAGACAGAGAGTTCTGCCGAGGC CTTGGTCTTCCTGTCTTTCCAATCTTGCCTTCCCCAACTCTCCCTGCTTCCTGGGACCATCGGTAGGGGTGGGGA GCAGCAGTCAACACAGCCCACTGGGAAGGGAGGCACAAGCAGCACTCCAGCTTCCCAGTGCTGCCCTCACACTCA CCTGGACAGGTCAGGGGACACAGGATGAAAGCCATGGCCCAATCTAAGAGCAAGACAAGTGAAAAGTGAGTACTC TCACTGTGTACCCCAGCATAGGAATAGTGAAACCTGCTACAACTGGAGGCTGCGTTCCCATGACTTCCTCCTCCG GAGGACAGGCTTCCGACCCCCTGTAAGCCAGATCCAGTGGGATGTGGGAGAGCTGGGCGGTCACCTTCCCTCTT GCCCGGTGGCCCATCACACTCACACTGCACCCTGGGCAAGCAGTTCCCTGAACCCCCAAGGGGCTCACAACCCT TAAAGCTGGAGCTTAAAGCCTCCTGGCTTAGTACAAGCAGGAGAACGCCTCACCTTCCACTCCTGCTTGTCTCCT TTGCTCTACCCTGGCTCCCCTGCCCGGAGGGAAAAATATTTACACAGAGTAGGAGACAAATTGGCTGAAAAGCTC

1233/2682 FIGURE 1111

MAAGFKTVEPLEYYRRFLKENCRPDGRELGEFRTTTVNIGSISTADGSALVKLGNTTVICGVKAEFAAPSTDAPD KGYVVPNVDLPPLCSSRFRSGPPGEEAQVASQFIADVIENSQIIQKEDLCISPGKLVWVLYCDLICLDYDGNILD ACTFALLAALKNVQLPEVTINEETALAEVNLKKKSYLNIRTHPVATSFAVFDDTLLIVDPTGEEEHLATGTLTIV MDEEGKLCCLHKPGGSGLTGAKLQDCMSRAVTRHKEVKKLMDEVIKSMKPK

1234/2682 FIGURE 1112

TCTCTCTCGCCGTTTCCGCTGTCAGGGCCTGCGGTGTGACTCGCGGGCTCAGCTGGTCCGGCCGTAGCACCTCCG $\texttt{CGCCGTCGCC} \underline{\textbf{ATG}} \texttt{TCGCGGTTTTTCACCACCGGTTCGGACAGCGAGTCCGAGTCGTCCTTGTCCGGGGAGGAGCT}$ CGTCACCAAACCTGTCGGAGGCAACTATGGCAAACAGCCATTGTTGCTGAGCGAGGATGAAGAAGATACCAAGAG AGTTGTCCGCAGTGCCAAGGACAAGAGGTTTGAGGAGCTGACCAACCTTATCCGGACCATCCGTAATGCCATGAA GATTCGTGATGTCACCAAGTGCCTGGAAGAGTTTGAGCTCCTGGGAAAAGCATATGGGAAGGCCAAAAGCATTGT GGACAAAGAAGGTGTCCCCCGGTTCTATATCCGCATCCTGGCTGACCTAGAGGACTATCTTAATGAGCTTTGGGA AGATAAGGAAGGGAAGAAGAAGATGAACAAGAACAATGCCAAGGCTCTGAGCACCTTGCGTCAGAAGATCCGAAA ATACAACCGTGATTTCGAGTCCCATATCACAAGCTACAAGCAGAACCCCGAGCAGTCTGCGGATGAAGATGCTGA GAAAAATGAGGAGGATTCAGAAGGCTCTTCAGATGAGGATGAGGATGAGGACGGAGTCAGTGCTGCAACTTTCTT AGAAGATTCCGAAGATGATGAAGACTGGGACACAGGTTCCACATCTTCCGATTCCGACTCAGAGGAGGAAGAAGG GAAACGGGAGGACAAAGCTAAGAAGAAGCACGACAGGAAATCCAAGCGCCTGGATGAGGAGGAGGAGGACAATGA AGGCGGGGAGTGGGAAAGGGTCCGGGGCGGAGTGCCGTTGGTTAAGGAGAAGCCAAAAATGTTTGCCAAGGGAAC TGAGATCACCCATGCTGTTGTTATCAAGAAACTGAATGAGATCCTACAGGCACGAGGCAAGAAGGGAACTGATCG TGCTGCCCAGATTGAGCTGCTGCAACTGCTGGTTCAGATTGCAGCGGAAAACAACCTGGGAGAGGGCGTCATTGT CAAGATCAAGTTCAATATCATCGCCTCTCTCTATGACTACAACCCCAACCTGGCAACCTACATGAAGCCAGAGAT GTGGGGGAAGTGCCTGGACTGCATCAATGAGCTGATGGATATCCTGTTTGCAAATCCCAACATTTTTGTTGGAGA GAATATTCTGGAAGAGAGTGAGAACCTGCACAACGCTGACCAGCCACTGCGTGTCCGTGGCTGCATCCTAACTCT GGTGGAACGAATGGATGAAGAATTTACCAAAATAATGCAAAATACTGACCCTCACTCCCAAGAGTACGTGGAGCA CTTGAAGGATGAGGCCCAGGTGTGTGCCATCATCGAGCGTGTGCAGCGCTACCTGGAGGAGAAGGGCACTACCGA GGAGGTCTGCCGCATCTACCTGCTGCGCATCCTGCACACCTACTACAAGTTTGATTACAAGGCCCATCAGCGACA GCTGACCCCGCCTGAGGGCTCCTCAAAGTCTGAGCAAGACCAGGCAGAAAATGAGGGCGAGGACTCGGCTGTGTT GATGGAGAGACTGTGCAAGTACATCTACGCCAAGGACCGCACAGACCGGATCCGCACATGTGCCATCCTCTGCCA CATCTACCACCATGCTCTGCACTCGCGCTGGTACCAGGCCCGCGACCTCATGCTCATGAGCCACTTGCAGGACAA CATTCAGCATGCAGACCCGCCAGTGCAGATCCTTTACAACCGCACCATGGTGCAGCTGGGCATCTGTGCCTTCCG CCAAGGCCTGACCAAGGACGCACAAACGCCCTGCTGGACATCCAGTCGAGTGGCCGAGCCAAGGAGCTTCTGGG CCAGGGCCTGCTGCTGCGCAGCCTGCAGGAGCGCAACCAGGAGCAGGAGAAGGTGGAGCGGCGCCGTCAGGTCCC CTTCCACCTGCACATCAACCTGGAGCTGCTGGAGTGTGTCTACCTGGTGTCTGCCATGCTCCTGGAGATCCCCTA GCGACAGCCĆCTGCTGGGTCCCCTGAGTCCATGCGGGAACATGTGGTCGCTGCCTCCAAGGCCATGAAGATGGG TGACTGGAAGACCTGTCACAGTTTTATCATCAATGAGAAGATGAATGGGAAAGTGTGGGACCTTTTCCCCGAGGC TGTCTATGACTCCATCAGCATGGAGACGCTGTCAGACATGTTTGAGCTGGATCTGCCCCACTGTGCACTCCATCAT GGTGTTTGACCACAAGCAGGGCACCTACGGGGGCTACTTCCGAGACCAGAAGGACGGCTACCGCAAAAACGAGGG $\tt CTACATGCGCCGGGTGGCTACCGCCAGCAGCAGTCTCAGACGGCCTAC\underline{TGA}_{GC}CTCTCCACTCTGTTTCCCGGCCTACTGGACGGCCTAC\underline{TGA}_{GC}$ GGGCCATCCAACCTTGAAGTCCTAAACCACACCTCAGTCACTAAAGGTCTGTTTAAAGTTGTTCTGGTTGATTGC AGGCTCAGATGAAGAGGTGAATTGAAC

1235/2682 FIGURE 1113

MSRFFTTGSDSESESSLSGEELVTKPVGGNYGKQPLLLSEDEEDTKRVVRSAKDKRFEELTNLIRTIRNAMKIRD VTKCLEEFELLGKAYGKAKSIVDKEGVPRFYIRILADLEDYLNELWEDKEGKKKMNKNNAKALSTLRQKIRKYNR DFESHITSYKQNPEQSADEDAEKNEEDSEGSSDEDEDEDGVSAATFLKKKSEAPSGESRKFLKKMDDEDEDSEDS EDDEDWDTGSTSSDSDSEEEEGKQTALASRFLKKAPTTDEDKKAAEKKREDKAKKHDRKSKRLDEEEEDNEGGE WERVRGGVPLVKEKPKMFAKGTEITHAVVIKKLNEILQARGKKGTDRAAQIELLQLLVQIAAENNLGEGVIVKIK FNIIASLYDYNPNLATYMKPEMWGKCLDCINELMDILFANPNIFVGENILEESENLHNADQPLRVRGCILTLVER MDEEFTKIMQNTDPHSQEYVEHLKDEAQVCAIIERVQRYLEEKGTTEEVCRIYLLRILHTYYKFDYKAHQRQLTP PEGSSKSEQDQAENEGEDSAVLMERLCKYIYAKDRTDRIRTCAILCHIYHHALHSRWYQARDLMLMSHLQDNIQH ADPPVQILYNRTMVQLGICAFRQGLTKDAHNALLDIQSSGRAKELLGQGLLLRSLQERNQEQEKVERRRQVPFHL HINLELLECVYLVSAMLLEIPYMAAHESDARRRMISKQFHHQLRVGERQPLLGPPESMREHVVAASKAMKMGDWK TCHSFIINEKMNGKVWDLFPEADKVRTMLVRKIQEESLRTYLFTYSSVYDSISMETLSDMFELDLPTVHSIISKM IINEELMASLDQPTQTVVMHRTEPTAQQNLALQLAEKLGSLVENNERVFDHKQGTYGGYFRDQKDGYRKNEGYMR RGGYROOOSQTAY

1236/2682 FIGURE 1114A

GAGATATCCTTACCTTACTCAACAGCACCAACAAGGATTGGTGGAAGGTGGAAGTGAACGATCGTCAGGGTTTTG TGCCGGCTGCGTACGTGAAGAAATTGGACCCCGCCCAGTCAGCCTCCCGGGAGAATCTCCTGGAGGAGCAAGGCA GCATAGCACTGCGGCAGGAGCAGATTGACAATCAATATCATTCTCTGCTGGAACTGGGTGAGAAGCGTAAAGGCA TGTTGGAGAAGAGTTGCAAGAAGTTTATGTTGTTCCGTGAAGCGAATGAACTACAGCAATGGATCAATGAGAAGG ${\tt AAGCCGCTCTGACAAGTGAGGAGGTGGGAGCAGACTTGGAGCAGGTTGAGGTGCTCCAGAAGAAGTTTGATGACT}$ TCCAGAAGGACCTGAAGGCCAATGAGTCACGGTTGAAGGACATTAACAAGGTAGCTGAAGACCTGGAGTCTGAAG GTCTTATGGCAGAGGTGCAGGCTGTGCAACAACAGGAAGTGTATGGCATGATGCCCAGGGATGAAACTGATT TGAATGAGCGCTGGCGGTCCCTACAGCAGCTGGCCGAGGAACGGAGCCAGCTCTTGGGCAGCGCCCATGAAGTAC AGAGGTTCCACAGAGATGCTGATGAAACCAAAGAATGGATTGAAGAGAAGAATCAAGCTCTAAACACAGACAATT ATGGACATGATCTCGCCAGTGTCCAGGCCCTGCAACGCAAGCATGAGGGCTTCGAGAGGGACCTTGCGGCTCTCG GTGACAAGGTAAACTCCCTTGGTGAAACAGCAGAGCGCCTGATCCAGTCCCATCCCGAGTCAGCAGAAGACCTGC AGGAAAAGTGCACAGAGTTAAACCAGGCCTGGAGCAGCCTGGGGAAACGTGCAGATCAGCGCAAAGTTGG GTGACTCCCACGACCTGCAGCGCTTCCTTAGCGATTTCCGGGACCTCATGTCTTGGATCAATGGAATACGGGGGT TGGTGTCCTCAGATGAGCTAGCCAAGGATGTCACCGGAGCTGAGGCATTGCTGGAGCGACACCAGGGACACCGGA CAGAAATCGATGCCAGGGCTGGCACTTTCCAGGCATTTGAGCAGTTTGGACAGCAGCTGTTGGCTCACGGACACT ATGCCAGCCCTGAGATCAAGCAGAAACTTGATATTCTTGACCAGAGCGTGCAGACCTGGAGAAGGCCTGGGTTC AGCGCAGGATGATGCTGGATCAGTGCCTTGAACTGCAGCTGTTCCATCGGGACTGTGAGCAAGCTGAGAACTGGA TGGCTGCCGGGAGGCCTTCTTGAATACCGAAGACAAAGGAGACTCACTGGACAGCGTAGAGGCTCTGATCAAAA AACATGAAGACTTTGACAAAGCGATTAACGTCCAGGAAGAAGATTGCTGCTGCTGCAGGCCTTTGCCGACCAGC TCATCGCTGCCGGCCATTATGCCAAGGGAGACATTTCTAGCCGGCGCAATGAGGTCTTGGACAGGTGGCGACGTC TGAAAGCCCAGATGATTGAGAAAAGGTCAAAGCTAGGAGAATCTCAAACCCTCCAACAGTTCAGCCGGGATGTGG ATGAGATTGAGGCTTGGATCAGTGAAAAATTGCAAACAGCGAGTGATGAGTCGTACAAGGATCCCACCAACATCC AGAGCAAGCACCAGAAGCACCAGGCTTTTGAAGCAGAGCTGCATGCCAACGCTGACCGGATCCGTGGGGTTATCG ACATGGGCAACTCCCTCATTGAACGTGGAGCCTGTGCCGGCAGTGAGGATGCTGTCAAGGCCCGCCTGGCTGCCT TAGCTGACCAGTGGCAGTTCTTGGTGCAAAAGTCAGCGGAAAAGAGCCAGAAACTGAAAGAAGCCAACAAGCAGC AGAACTTCAACACAGGGATCAAGGACTTTGACTTCTGGCTGTCTGAGGTGGAGGCCCTGCTGGCATCCGAAGATT ATGGCAAAGACCTGGCTTCTGTGAACAACCTGCTGAAAAAGCATCAACTGCTGGAAGCAGATATATCTGCCCATG AGGATCGCCTGAAGGACCTGAACAGCCAGGCAGACAGCCTGATGACCAGCAGTGCCTTCGACACCTCCCAAGTAA AGGACAAGAGGGACACCATCAACGGGCGCTTCCAGAAGATCAAGAGCATGGCGGCCTCCCGGCGAGCCAAGCTGA ATGAATCCCATCGCCTGCACCAGTTCTTCCGGGACATGGATGACGAGGAGTCCTGGATCAAGGAGAAGAAGCTGC TGGTGGGCTCAGAGGACTACGGCCGGGACCTAACTGGCGTGCAGAACCTGAGGAAGAAGCACAAGCGGCTGGAAG CAGAACTGGCTGCGCATGAGCCGGCTATTCAGGGTGTCCTGGACACTGGCAAGAAGCTGTCCGATGACAACACCA TCGGGAAAGAGGAGATCCAGCAGCGGCTGGCGCAGTTTGTGGAGCACTGGAAAGAGCTGAAGCAGCTGGCAGCTG CCCGGGGTCAGCGGCTGGAAGAGTCCTTGGAATATCAGCAGTTTGTAGCCAATGTGGAAGAGGAAGAAGCCTGGA TCAATGAGAAAATGACCCTGGTGGCCAGCGAAGATTATGGCGACACTCTTGCCGCCATCCAGGGCTTACTGAAGA AACATGAAGCTTTTGAGACAGACTTCACCGTCCACAAGGATCGCGTGAATGATGTCTGCACCAATGGACAAGACC TCATTAAGAAGAACAATCACCATGAGGAGAACATCTCTTCAAAGATGAAGGGCCTGAACGGGAAAGTGTCAGACC ACGTGGTGGAGTCCTGGATCGGTGAAAAGGAGAACAGCTTGAAGACAGATGATTATGGCCGAGACCTGTCTTCTG TGCAGACGCTCCTCACCAAACAGGAAACTTTTGACGCTGGGCTGCAGGCCTTCCAGCAGGAAGGCATTGCCAACA TCACTGCCCTCAAAGATCAGCTTCTCGCCGCCAAACACGTTCAGTCCAAGGCCATCGAGGCCCGGCACGCCTCCC TCCGCAAGGTGGAGGACCTCTTCCTGACCTTCGCCAAAAAGGCTTCTGCCTTCAACAGCTGGTTTGAAAAATGCAG AGGAGGACTTAACAGACCCCGTGCGCTGCAACTCCTTGGAAGAAATCAAAGCTTTGCGCGAGGCCCACGACGCCT TCCGCTCCTCAGCTCTGCCCAGGCTGACTTCAACCAGCTGGCCGAGCTGGACCGCCAGATCAAGAGCTTCC GCGTAGCCTCCAACCCCTACACCTGGTTTACCATGGAGGCCCTGGAGGAGACCTGGAGGAACCTACAGAAAATCA TCAAGGAGAGGGAGCTGGAGCTGCAGAAGGAGCAGCGGCGGCAGGAGGAGAACGACAAGCTGCGCCAGGAGTTTG

1237/2682 FIGURE 1114B

CCCAGCACGCCAACGCCTTCCACCAGTGGATCCAAGAGACCAGGACATACCTCCTCGATGGGTCCTGTATGGTGG AAGAGTCGGGGACCCTCGAATCCCAGCTTGAAGCTACCAAACGCAAGCACCAGGAAATCCGAGCCATGAGAAGTC AGCTCAAAAAGATCGAGGACCTGGGGGCCCCATGGAGGAGGCCCTCATCCTGGACAACAAGTACACGGAGCACA AGATCCAGGCCAGGAACACAACAGGTGTGACTGAGGAGGCCCTCAAAGAATTCAGCATGATGTTTAAACACTTTG ACTAGGACAAGTCTGGCAGGCTGAACCATCAGGAGTTCAAATCTTGCCTGCGCTCCCTGGGCTATGACCTGCCCA TGGTGGAGGAAGGGGAACCTGACCCTGAGTTCGAGGCAATCCTGGACACGGTGGATCCGAACAGAGATGGCCATG TCTCCTTGCAAGAATACATGGCTTTCATGATCAGCCGCGAAACTGAGAACGTCAAGTCCAGCGAGGAGATTGAGA GCGCCTTCCGGGCCCTCTGCTCAGAGGGAAAGCCTTACGTGACCAAGGAGGAGCTCTACCAGAACCTGACCCGGG AACAAGCCGACTACTGCGTCTCCCACATGAAGCCCTACGTGGACGGCAAGGGCCGCGAGCTCCCCACCGCGTTCG TGCGTCGCCTTGCTGCATGTCCGCTCCTCTGTGTGCTCTCACTTTCCACTGTAACCTTAAGCCTGCTTAGCTTGG AATAAGACTTAGGAGAATATGGTGCTTCACTAACCCGCTTCCGGTCCAGTCACAATCATCATGTCACTGTGGGGA $\tt CCCAGATCTGTGTCTTGAAGCAGCTGCCCTCATTCCGACTTCAGAAAATCGAAGCAGCTGGCTCCTCCCCTTGTT$ AAAAAAAAC

1238/2682 FIGURE 1115

1239/2682 FIGURE 1116

MRPRLWLLLAAQLTVLHGNSVLQQTPAYIKVQTNKMVMLSCEAKISLSNMRIYWLRQRQAPSSDSHHEFLALWDS AKGTIHGEEVEQEKIAVFRDASRFILNLTSVKPEDSGIYFCMIVGSPELTFGKGTQLSVVDFLPTTAQPTKKSTL KKRVCRLPRPETQKGPLCSPITLGLLVAGVLVLLVSLGVAIHLCCRRRRARLRFMKQLRLHPLEKCSRMDY

1240/2682 FIGURE 1117A

GTACTCTCGCGGTATTTGTCCCGACTCTCGCGGGGTTTAGCGTGGCATTGGGAGGCCCGGCCTGGGGGAGGAGAC GGCGTTCCGTTAGCGGCGTTGGGGTTTGGCTGCAGTGGCAGTGCTTTCTCTTCTGCTCACGGGGACCCGCTCAGG $\tt CTGGAGGCCAGCTCTTGCCGCCACCTCGGTCGCG\underline{ATG}GGGGCGCAGGACCGGCCGCAGTGCCACTTCGACA$ TCGAGATCAACCGGGAGCCGGTTGGTCGCATTATGTTTCAGCTCTTCTCAGACATATGTCCAAAAACATGCAAAA ACTTCCTTTGCTTGTGCTCAGGAGAAAAGGCCTTGGGAAAACAACTGGGAAGAAGTTATGTTATAAAGGTTCTA CGTTCCATCGTGTGGTTAAAAACTTTATGATTCAGGGTGGGGACTTCAGTGAAGGTAATGGAAAAGGTGGAGAAT CAATTTATGGTGGATATTTTAAAGATGAAAACTTTATTCTCAAACATGACAGAGCGTTCCTTTTATCAATGGCAA ATCGAGGGAAACATACCAATGGTTCCCAGTTTTTCATTACCACAAAGCCTGCTCCACACCTGGATGGGGTGCATG TAGTCTTTGGACTGGTTATTTCTGGTTTTGAAGTAATCGAACAAATTGAAAATCTGAAGACCGATGCTGCAAGCA GACCATATGCAGATGTGCGAGTTATTGACTGTGGAGTACTTGCCACAAAATCAATAAAAGATGTTTTTGAGAAAA AAAGGAAGAAACCAACTCATTCAGAAGGCTCGGATTCCTCTTCCAATTCCTCTTCTTCAGAATCATCTTCAG AAAGTGAACTTGAACATGAGAAGCAGAAGGAGGAGAAACATAAGAGGAGGCCAAAAGTTAAACGTTCTAAAAAGA GGCGAAAGGAAGCAAGCAGTTCAGAAGAGCCAAGGAATAAACATGCAATGAACCCAAAAGGTCACTCTGAGAGGA GTGATACCAATGAAAAAAGGTCAGTTGATTCCAGTGCTAAAAGGGAAAAACCTGTGGTCCGCCCAGAAGAGATTC CTCCAGTGCCTGAGAACCGATTTTTACTGAGAAGAGATATGCCTGTTGTTACTGCAGAACCTGAACCGAAGATTC CAATTCGCTATCACACACCTCCAAGATCAAGATCCTGTTCTGAGTCAGATGATGATGACAGCAGTGAAACTCCTC CTCACTGGAAAGAGGAAATGCAGAGATTAAGAGCATATAGACCACCTAGTGGAGAAAAATGGAGTAAAGGAGATA AGTTAAGTGACCCCTGTTCAAGCCGATGGGATGAAAGAAGCTTGTCTCAGAGATCCAGATCATGGTCCTATAATG GATATTATTCAGACCTTAGTACAGCAAGACACTCTGGCCACCATAAAAAACGCAGAAAAAGAAAAAAAGGTTAAGC CTGACATAGAATCCTCAAAATCTTCCACTCGAAGAATGAAATCCTCTTGTGATAGAGAAAGGAGTTCTCGTTCTT CCTCATTGTCATCTCATCACTCATCAAAGAGAGACTGGTCTAAATCTGATAAGGATGTCCAGAGCTCTTTAACCC ATTCCAGCAGAGACTCATACAGATCAAAATCTCACTCACAGTCTTATTCTAGAGGAAGCTCAAGATCAAGGACTG CGTCAAAGTCCTCATCACATTCTCGAAGTAGATCAAAGTCCAGATCTAGTTCCAAGTCTGGGCACCGAAAGAGAG CATCAAAATCACCAAGAAAAACAGCTTCTCAGTTAAGTGAAAATAAACCAGTTAAAACAGAACCTTTAAGAGCAA CCATGGCACAAAATGAAAATGTAGTAGTACAACCAGTTGTAGCAGAAAATATTCCTGTAATACCACTGAGTGACA GTCCCCCCCTTCAAGATGGAAGCCTGGACAGAAACCTTGGAAGCCCTCTTATGAGCGAATTCAGGAAATGAAAG CTAAAACAACCCATTTGCTACCCATCCAAAGCACTTACAGTTTAGCAAATATTAAAGAGACTGGTAGCTCATCAT CCTACCATAAAAGAGAAAAAAATTCGGAAAGTGATCAGAGCACTTATTCAAAATACAGTGATAGAAGTTCAGAAA GCTCACCAAGGTCAAGGAGCAGATCTTCTAGGAGTAGATCTTATTCCAGATCATATACAAGATCACGTAGTCTAG GTAGTAGATCATCTTCATATACTTCTATTAGCAGTGATGATGGAAGGCGAGCTAAGAGGAGACTTAGATCCAGTG GGAAAAAAAATAGCGTTTCACATAAAAAGCATAGCAGCAGCTCTGAAAAGACACTTCACAGTAAATATGTCAAAG GTAGAGACAGGTCTTCATGTGTGAGAAAGTATAGCGAGAGCAGATCATCTTTAGATTATTCTTCAGACAGTGAGC AGTCAAGTGTTCAGGCCACACAGTCAGCCCAGGAAAAAGAGAAGCAGGGCCAAATGGAAAGAACACATAATAAAC AGAATCTTTCTGATCACCTTAGAAATGGCAGTAAGCCCAAAAGGAAGAATTATGCTGGTAGTAAATGGGACTCTG AGGCCACATCCGATTCTGAATCAGAGGTTAGTGAAATTCACATCAAAGTCAAACCCACAACCAAGTCGTCCACAA ATACTTCACTGCCTGATGATAATGGTGCTTGGAAATCAAGCAAACAGCGCACATCAACTTCTGACTCTGAGGGGT CCTGTTCCAATTCGGAAAACAATAGGGGAAAGCCACAAAAGCACAAACATGGGTCAAAGGAAAATCTTAAAAGAG AACACCCAAAAAAGTGAAAGAAAATTGAAAGGGAAAAAAGACAAAAAGCATAAGGCTCCAAAACGAAAGCAAG AATCAAAAGAGAAAAAGTTTCTGAAAACAATGAAACCATAAAAGATAATATTCTAAAAAACTGAGAAATCCAGTG AAGAGGACCTTTCAGGTAAACATGATACAGTGACTGTTTCATCAGATCTTGATCAGTTTACTAAAGATGATAGTA AACTCAGTATTTCTCCCACAGCTTTAAATACTGAGGAAAATGTGGCCTGTTTACAAAACATTCAGCACGTTGAAG AAAGTGTTCCCAATGGAGTGGAAGATGTGCTTCAAACAGATGACAACATGGAGATCTGCACTCCTGATAGGAGTT

1241/2682 FIGURE 1117B

CCCCAGCAAAAGTAGAGGAGACTTCCCCTCTAGGAAATGCACGGCTTGATACCCCAGATATAAACATTGTTTTGA AGCAGGATATGGCAACGGAACATCCTCAAGCAGAGGTAGTAAAACAGGAAAGCAGCATGTCCGAAAGTAAAGTGT TGGGTGAAGTGGGGAAACAGGACAGCAGCTCTGCTAGCTTGGCTAGTGCTGGAGAAAGTACCGGGAAGAAGGAGG TGGCTGAGAAGAGCCAGATCAACCTCATTGATAAGAAATGGAAGCCCCTGCAAGGTGTGGGGAACCTGGCAGCAC CTAATGCTGCCACATCCAGTGCTGTGGAAGTTAAGGTGTTGACCACTGTGCCTGAAATGAAACCACAAGGCTTGA ACCGTAGACCAAGAAATCAGGAGGAGTTCAAGTGATGAGCAGACGCCTAGTCGGGATGATGATAGCCAGTCCAGGA GAAGTCGATCGAGAAGTTCCACATCATCTTATCGATCAAGAAGCTACTCTAGAAGTCGGAGCAGAGGATGGTACA GCAGAGGCCGAACCAGAAGCCGGAGCAGTTCCTACCGGAGTTACAAAAGTCACAGGACGTCCAGCAGGAGCAGAT CCAGGAGCAGCTCATATGATCCCCACAGTCGATCCAGGTCCTACACCTACGATAGCTACTATAGCAGGAGTCGGA GTCGAAGTAGAAGCCAGAGAAGTGACAGTTACCACCGAGGCAGAAGTTATAATCGGCGGTCCAGGAGTTGTAGAT $\tt CTTATGGCTCTGACAGTGAAAGTGACCGAAGTTACTCTCATCACCGGAGCCCCAGTGAGAGCAGCAGATACAGT\underline{\textbf{T}}$ **GA**AAACGTCCGGATACAAATTATATCTTATTTGTAAATATCTGGCAACTTAGCTTAAGAAATGTAATGACAGTCT GTTGTTCTATTTCAATATCAGAGGTGAATTTCAAAAATAGACACTTCTTAATTGTTACTGGTTCATTTACATGTG GGGAGAAGAATTTAAAATACAGATATGTCTCCTAAAAATATTTTTTATGCCACATTTTACAGTAGCCAACTATGGA AATGAATTTCATTTTCTTGAATCAAGAAATCGTGAAATTTATCTATGTATAATTTGCAATATTATTTTAAGTCTA TTTCACTCTATCTTACGTATCCCTTAGAATACAGATTCTTTTTGCCTGTTTTTCCAGTTTTAGCATATATGCTGC CAAGCATAGAACTGTGAAGGAGAACTGTTAAAGGCGGCCAAATATTTATATACTGATTACATAGAGTCTTGTACA TATGTGCTCTAAAAACAAACCACCCAGAATTGATACTGTTGGTAACCAGGAGTATAAGGCAGTGGCTCTGGGGTT CTTAATTCATTCCTAACTTCTTTGATACTTCACAGGATTAGGAAAGTGGTCATCATACATCCCACACAGTCTGTA CTTACTATTTTATGTTCTTTTTAATCAATACCGATCAGAAGTTTAGGTTATAAAAACAATTCTACTTCATGCTTT TTCAGACAAAATCACTGGCACCAAAAATGGTTTATTCTGAGCTGTCTTCACTTTGACTATTTGGGGGGGCTTCTCT TGTGTGTGTGTGCCTCTGGAAGAGTGAAGAATGGACTTCAAAAGTAACATCAAAAATCTAACTGCCACCATCCTG GAGACATTTTGCAGGGCTTTCCTTTCAAGTCTTTCAAGTACAGGATATTACCACAACAGCAGCTGAACTGTTGTA ACCAGCATGTTTTCCTATTTCCACTGTGACCTGCAGCTGACTCAAAGCCTTGCGTGACCTGACCCAGGTGCAAG AGACAGGGGAAGAGGGATAGAGGGTATAGCATAAATTACATATTTTCATGGCTTTGGGTGGTTCCTCCAAAAATA TTTGAATTTGTTCCCCAAGTGTACTTAATCACCTTAGTGCCAGTTTAATCCAGTTATGCAGAAGAAATTCATATT GGTTGCCTGATGTAGAGCTCAGCACCACCCTACCACAGGCCTTGTCTGGTGTATTTGGGAAGTGGAAAAGAGCCC TCAGTTGGAGGGAGCTGACAACCCTTGGTGGAGGGAGGGTGCCCTTGAATGTATTAAAACTATCACCCAAAGAAG GTATGAAAACAGGGTAAGGTGGTCAGTTGTTTGCCAGGTCAATAGACAGAAAGTACATTAGAAAACAGGACTTAG GCCAAACAAACAATACTGGATACTGAATACAAAACAGTATGATTTATATTAAAGGTTTCCAAAGGTTGCCTGCAA AGGAGAATATTACTACTAGTCAGCAGGAAAAAAATGCATTCAGAACCCAAGCAGAAACTGCCAAATGTAATTAGG TTAAGAAAAGTTACCCTTGGGCAGTGTATTAGTTTTCTATTGCTGTGACAAATTACCCCCAAATTTAGCAGTTT AAAAAACAATACCCATAGCAGTTCTGTAGCTCATGAGTCTGGCACAGTGTGGCTGGATTCTCTGCTCAGGGTCTT AAAGGCTGAAATAAGGGTTGGCAGGACAACATTCCTTCATGGAGGCTCTGGGGAAGAATCTGCTTCTAAGTTCAT CCTCCTGTTTTAGGGGCATATGATTAGCTCAAGCCCACAGATATATTTTAAGGTTGATTGTGCGATAGAACATAA TTGCAGGAGTACTGTCTCATCTCATCATATTCACGGGTTCTGGAGATTAGCTCATTGAAAGTGGGAGGGCATTT TCAAATTCTGCCTACCACAGGCAATAACTGCCCATCTCAGCTGTAGGTGGAATTTTTACCCAGAAAAGATAGGCC CTAGAAGCCTCATTTCTTTTCTCCATGGAAAAGGACAGCCCTCTGCTGCAGCGTTCAACTTGTGTTTTACTGAC AGAGTGAACTACAGAAATAGCTTTTCTTCCTAAAGGGGATTGTTCTACATTTTGAAGTTATTTTTTAATAAAATT GAATTATGTTGT

1242/2682 FIGURE 1118

MGAODRPOCHFDIEINREPVGRIMFQLFSDICPKTCKNFLCLCSGEKGLGKTTGKKLCYKGSTFHRVVKNFMIQG GDFSEGNGKGGESIYGGYFKDENFILKHDRAFLLSMANRGKHTNGSQFFITTKPAPHLDGVHVVFGLVISGFEVI EQIENLKTDAASRPYADVRVIDCGVLATKSIKDVFEKKRKKPTHSEGSDSSSNSSSSSSSSESELEHERSRRRK HKRRPKVKRSKKRRKEASSSEEPRNKHAMNPKGHSERSDTNEKRSVDSSAKREKPVVRPEEIPPVPENRFLLRRD MPVVTAEPEPKIPDVAPIVSDQKPSVSKSGRKIKGRGTIRYHTPPRSRSCSESDDDDSSETPPHWKEEMQRLRAY RPPSGEKWSKGDKLSDPCSSRWDERSLSQRSRSWSYNGYYSDLSTARHSGHHKKRRKEKKVKHKKKGKKQKHCRR HKOTKKRRILIPSDIESSKSSTRRMKSSCDRERSSRSSSLSSHHSSKRDWSKSDKDVQSSLTHSSRDSYRSKSHS ${\tt QSYSRGSSRSRTASKSSSHSRSRSKSRSSSKSGHRKRASKSPRKTASQLSENKPVKTEPLRATMAQNENVVVQPV}$ VAENIPVIPLSDSPPPSRWKPGQKPWKPSYERIQEMKAKTTHLLPIQSTYSLANIKETGSSSSYHKREKNSESDQ STYSKYSDRSSESSPRSRSRSRSRSRSYSRSYTRSRSLASSHSRSRSPSSRSHSRNKYSDHSQCSRSSSYTSISSD DGRRAKRRLRSSGKKNSVSHKKHSSSSEKTLHSKYVKGRDRSSCVRKYSESRSSLDYSSDSEQSSVQATQSAQEK EKQGQMERTHNKQEKNRGEEKSKSERECPHSKKRTLKENLSDHLRNGSKPKRKNYAGSKWDSESNSERDVTKNSK NDSHPSSDKEEGEATSDSESEVSEIHIKVKPTTKSSTNTSLPDDNGAWKSSKQRTSTSDSEGSCSNSENNRGKPQ KHKHGSKENLKREHTKKVKEKLKGKKDKKHKAPKRKQAFHWQPPLEFGEEEEEEIDDKQVTQESKEKKVSENNET IKDNILKTEKSSEEDLSGKHDTVTVSSDLDQFTKDDSKLSISPTALNTEENVACLQNIQHVEESVPNGVEDVLQT DDNMEICTPDRSSPAKVEETSPLGNARLDTPDINIVLKQDMATEHPQAEVVKQESSMSESKVLGEVGKQDSSSAS ${\tt LASAGESTGKKEVAEKSQINLIDKKWKPLQGVGNLAAPNAATSSAVEVKVLTTVPEMKPQGLRIEIKSKNKVRPG}$ SLFDEVRKTARLNRRPRNQESSSDEQTPSRDDDSQSRSPSRSKSETKSRHRTRSVSYSHSRSRSSSSSSTSSYRS RSYSRSRGWYSRGRTRSRSSSYRSYKSHRTSSRSRSRSSSYDPHSRSRSYTYDSYYSRSRSRSRSQRSDSYHR GRSYNRRSRSCRSYGSDSESDRSYSHHRSPSESSRYS

1243/2682 FIGURE 1119

GCGGCGCGGGGCACTGGGGCCCTTTTGCTGAGGGGCTCTCTACTGGCTTCTGGCCGCGCTCCGCGCCGCCCCCCC TCTGGATTGCCCCGAAACACCGTGGTACTGTTCGTGCCGCAGCAGGAGGCCTGGGTGGTGGAGCGAATGGGCCGA TTCCACCGGATCCTGGAGCCTGGTTTGAACATCCTCATCCCTGTGTTAGACCGGATCCGATATGTGCAGAGTCTC AAGGAAATTGTCATCAACGTGCCTGAGCAGTCGGCTGTGACTCTCGACAATGTAACTCTGCAAATCGATGGAGTC $\tt CTTTACCTGCGCATCATGGACCCTTACAAGGCAAGCTACGGTGTGGAGGACCCTGAGTATGCCGTCACCCAGCTA$ ${\tt GCCAGCATTGTGGATGCCATCAACCAAGCTGCTGACTGCTGGGGTATCCGCTGCCTCCGTTATGAGATCAAGGAT}$ ${\tt ATCCATGTGCCACCCCGGGTGAAAGAGTCTATGCAGATGCAGGTGGAGGCAGAGCGGCGGAAACGGGCCACAGTT}$ $\tt CTAGAGTCTGAGGGGACCCGAGAGTCGGCCATCAATGTGGCAGAAGGGAAGAAACAGGCCCAGATCCTGGCCTCC$ GAAGCAGAAAAGGCTGAACAGATAAATCAGGCAGCAGGAGAGGCCAGTGCAGTTCTGGCGAAGGCCAAGGCTAAA GAGCAGTATGTCAGCGCGTTCTCCAAACTGGCCAAGGACTCCAACACTATCCTACTGCCCTCCAACCCTGGCGAT GTCACCAGCATGGTGGCTCAGGCCATGGGTGTATATGGAGCCCTCACCAAAGCCCCCAGTGCCAGGGACTCCAGAC ${\tt TCACTCTCCAGTGGGAGCAGCAGAGTGTCCAGGGTACAGATGCAAGTCTTGATGAGGAACTTGATCGAGTCAAGTCTAGGGAACTTGATCGAGTCAAGTCTAGGAGTCAAGTCTTGATGAGGAACTTGATCGAGTCAAGTCTAGGAGTCAAGTCTTGATGAGGAACTTGATCGAGTCAAGTCTAGAGTCAAGTCTTGATGAGGAACTTGATCGAGTCAAGTCTAGAGTCAAGTCTTGATGAGGAACTTGATCGAGTCAAGTCTAGAGTCAAGTCTAGATGAAGTCTAGATGAAGTCTAGATGAAGTCTAGATGAAGTCTAGATGAAGTCTAGATGAAGTCTAGATGAAGTCTAGATGAAGTCTAGATGAAGTCTAGATGAAGTCTAGATGAAGTCTAGATGAAGTCTAGATGAAGTCTAGATGAAGTCAAGTCTAGATGAAGTCTAGATGAAGTCAAGTCTAGATGAAGTCAAGTCTAGATGAAGTCAAGT$ TCCCTGCCAAGATTTTGGTTTTTATTTTTTTTTTTTATTTGAACTTTAGTCGTGTAATAAACTCACCAGTGGCAAACCTG ΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑ

1244/2682 FIGURE 1120

MLARAARGTGALLLRGSLLASGRAPRRASSGLPRNTVVLFVPQQEAWVVERMGRFHRILEPGLNILIPVLDRIRY VQSLKEIVINVPEQSAVTLDNVTLQIDGVLYLRIMDPYKASYGVEDPEYAVTQLAQTTMRSELGKLSLDKVFRER ESLNASIVDAINQAADCWGIRCLRYEIKDIHVPPRVKESMQMQVEAERRKRATVLESEGTRESAINVAEGKKQAQ ILASEAEKAEQINQAAGEASAVLAKAKAKAEAIRILAAALTQHNGDAAASLTVAEQYVSAFSKLAKDSNTILLPS NPGDVTSMVAQAMGVYGALTKAPVPGTPDSLSSGSSRDVQGTDASLDEELDRVKMS

1245/2682 FIGURE 1121

TGTATTCAATGCACTGGATTTGATGGAAAATAAGACATTCTTGGAAAAAACTCAAGTTTGGTATAGGAGATGGCAA TTTGCAGTATTACCTGTACAATTGGAGGTGTCCAGGTACAGATTCTGAAAAGGGCTCTGGTAACTTCGTTAACGC CAATGGCAAGCTGCTTCCTGACGTGTGCAGGCGTCCACCCTGACACTTGCTGCTTAGCATCTGTTTTCTTCTCCT TTTTCTTCTTATCTTCAATCTTCTGAAGTCCAATAGCTTTAAGCCTGTCCTCAAGCGTCTGTAGGATGAAGTGCA TATCCTCGCTCTCCAGAGCGCTCCAGCGGATGATGTATGGGTTGTTCAACGACGTCTCCACAACCAGAGGTCTCG TCTTACGGAGAGATCCCCGCCCCGGTGCTTGAGGAGCTGCAGCCATTTTGAAAATCCTTCCAAGAAGCAAAATGA CAACAGAAAAAATTCATGTTAGCGACAACTGCATGACTTAAGAATATCTTGACTGTACTCTCTGATTCTTATTTA TTTATGTATTTATTTTTTGAGACAGAATTTCACTCTTGTTGCCCAGGCTGGAGTGCAGTGGCACAATCTCAGCTC ACTGCAACCTCCACCTCCTGGGTTCAAGCGATTCTCCTGCCTCAGCCTCCCGAGTAGCTGGGATTACAGGCGCCC AAACTCCTGACCTCAGGTGATCCACCCACCTCGGCCTCCCAAAGTGCTGGGGATTACAGGCATGAGCCACTGCGCC CGGCCTGTACTCTGATTCTGGATAAGCTAGAGCAAGCCTGATTATATAAGTCCAATTAGGTGAGCATACGCTTGT $\tt CTTCCTTTTAAAGATTAAGTAATTTTTTTTCCCCATTTTTCTTACCEGATTTTGAATGCTCTACGAAGGCTCT$ TTAAAATACTCAGGACTATGGGTGAGTAGTGTTTAATTTTCCCCATTTTTTTATATGACTTTGTCTTTATTCCTA TACAAGCAATATGTGAAAGTTTTAATTATTGCAATCATAGTACAATTCCATTTGTCTATTTCATTTATTAAAAAT

1246/2682 FIGURE 1122A

CGCCCGGCGCGGGGCCCTGCGGTAGCCTCAGGCCCCTCCCCTGGACCCGCCGCAGAGCCAGTGCAGAATACAGA AACTGCAGCCATGACCACGCACGTCACCCTGGAAGATGCCCTGTCCAACGTGGACCTGCTTGAAGAGCTTCCCCT CCCCGACCAGCCATGCATCGAGCCTCCACCTTCCTCCATCATGTACCAGGCTAACTTTGACACAAACTTTGA GCTGGAGGAAGGACATGAGTATGCGGTCATGCTGTACACCTGGCGCAGCTGTTCCCCGGGCCATTCCCCAGGTGAA ATGCAACGAGCCCAACCGAGTAGAGATCTATGAGAAGACAGTAGAGGTGCTGGAGCCGGAGGTCACCAAGCT CATGAAGTTCATGTATTTTCAGCGCAAGGCCATCGAGCGGTTCTGCAGCGAGGTGAAGCGGCTGTGCCATGCCGA GCGCAGGAAGGACTTTGTCTCTGAGGCCTACCTCCTGACCCTTGGCAAGTTCATCAACATGTTTGCTGTCCTGGA TGAGCTAAAGAACATGAAGTGCAGCGTCAAGAATGACCACTCTGCCTACAAGAGGGCAGCACAGTTCCTGCGGAA GATGGCAGATCCCCAGTCTATCCAGGAGTCGCAGAACCTTTCCATGTTCCTGGCCAACCACAACAGGATCACCCA TTACTACGAGAACAAGATGTACCTGACTCCCAGTGAGAAACATATGCTCCTCAAGGTGATGGGCTTTGGCCTCTA CCTAATGGATGGAATGTCAGTAACATTTACAAACTGGATGCCAAGAAGAGAATTAATCTTAGCAAAATTGATAA ATTCTTTAAGCAGCTGCAGGTGGCCCCTTTTCGGCGACATGCAGATAGAGCTGGCCAGATACATTGAGACCAG TGCTCACTATGAAGAGAACAAGTCCAAGTGGACGTGCACCCAGAGCAGCATCAGCCCCCAGTACAATATCTGCGA GCAGATGGTTCAGATCCGGGATGACCACATCCGCTTCATCTCCGAGCTCGCTACAGCAACAGTGAGGTGGT GACGGGCTCAGGGCTGGACAGCCAGAAGTCAGACGAGGAGTATCGCGAGCTCTTCGACCTAGCCCTGCGGGGTCT GCAGCTTCTATCCAAGTGGAGCGCCCACGTCATGGAGGTGTACTCTTGGAAGCTGGTTCATCCCACAGACAAGTT CTGCAACAAGGACTGTCCTGGCACCGCGGAGGAATATGAGAGAGCCACACGCTACAATTACACCAGTGAGGAAAA ATTTGCCTTCGTTGAGGTGATCGCCATGATCAAAGGCCTGCAGGTGCTCATGGGCAGGATGGAGAGCGTCTTCAA CCAGGCCATCAGGAACACCATCTACGCGGCATTGCAGGACTTCGCCCAGGTGACGCTGCGTGAGCCCCTGCGGCA GGCGGTACGGAAGAAGAAGATGTCCTCATCAGCGTCCTACAGGCAATTCGAAAGACCATCTGTGACTGGGAGGG AGGGCGAGAGCCCCCTAATGACCCATGCTTGAGAGGGGAGAAGGACCCCAAAGGTGGATTTGATATCAAGGTGCC CCGGCGTGCTGTGGGGCCATCCAGCACACAGCTGTACATGGTGCGGACCATGCTTGAATCACTCATTGCAGACAA GTCCTTCTTCACACATCTGCTCAACATCAGTGAAGCCCTGCAGCAGTGTTGTGACCTCTCCCAGCTCTGGTT $\tt CCGAGAATTCTTCCTGGAGTTAACCATGGGCCGACGAATCCAGTTCCCCATCGAGATGTCCATGCCCTGGATTCT$ AACGGACCATATCCTGGAAACCAAAGAACCTTCCATGATGGAGTATGTCCTCTACCCTCTGGATCTGTACAACGA CAGCGCCTACTATGCTCTGACCAAGTTTAAAAAGCAGTTCCTGTACGATGAGATAGAAGCTGAGGTGAACCTGTG GGATAAACGTTTTCGAGCTGAGTGTAAGAATTATGGCGTCATCATTCCGTATCCACCGTCCAATCGCTATGAAAC ACTGCTGAAGCAGAGACACGTCCAGCTGTTGGGTAGATCAATTGACTTGAACAGACTCATTACCCAGCGCATCTC TGCCGCCATGTATAAATCCTTGGACCAAGCTATCAGCCGCTTTGAGAGTGAGGACCTGACCTCCATTGTGGAGCT GGAGTGGCTGCTGGAGATTAACCGGCTCACGCATCGGCTGCTCTGTAAGCATATGACGCTGGACAGCTTCGATGC CATGTTCCGAGAGGCCAATCACAATGTGTCCGCCCCTATGGCCGTATCACCCTGCATGTCTTCTGGGAACTGAA CTTTGACTTTCTCCCCAACTACTGCTACAATGGGTCCACTAACCGTTTTGTGCGGACTGCCATTCCTTTCACCCA AGAACCACAACGAGACAAACCTGCCAACGTCCAGCCTTATTACCTCTATGGATCCAAGCCTCTCAACATTGCCTA CAGCCACATCTACAGCTCCTACAGGAATTTCGTGGGGCCACCTCATTTCAAGACTATCTGCAGACTCCTGGGTTA TCAGGGCATCGCTGTGGTCATGGAGGAACTGCTAAAGATTGTGAAGAGCTTGCTCCAAGGAACCATTCTCCAGTA TGTGAAAACACTGATAGAGGTGATGCCCAAGATATGCCGCTTGCCCCGACATGAGTATGGCTCCCCAGGGATCCT GGAGTTCTTCCACCACCAGCTGAAGGACATCATTGAGTACGCAGAGCTCAAAACAGACGTGTTCCAGAGCCTGAG GGAAGTGGGCAATGCCATCCTCTTCTGCCTCCTCATAGAGCAAGCTCTGTCTCAGGAGGAGGTCTGCGATTTGCT CCATGCCGCACCCTTCCAAAACATCTTGCCTAGAGTCTACATCAAAGAGGGGGAGCGCCTGGAGGTCCGGATGAA ACGTCTGGAAGCCAAGTATGCCCCGCTCCACCTGGTCCCTCTGATCGAGCGGCTGGGGACCCCTCAGCAAATCGC CATTGCTCGCGAGGGTGACCTCCTGACCAAGGAGCGGCTGTGCTGTGCCTGTCCATGTTCGAGGTCATCCTGAC CCGCATTCGGAGCTACCTGCAGGACCCCATCTGGCGGGGCCCACCGCCCACCAATGGCGTCATGCACGATGA GTGTGTGGAGTTCCACCGGCTGTGGAGCGCCATGCAGTTCGTGTACTGCATCCCTGTGGGAACCAACGAGTTCAC

1247/2682 FIGURE 1122B

1248/2682 FIGURE 1123

APARGPAVASGPSPGPAAEPVONTETAAMTTHVTLEDALSNVDLLEELPLPDQQPCIEPPPSSIMYQANFDTNFE DRNAFVTGIARYIEOATVHSSMNEMLEEGHEYAVMLYTWRSCSRAIPQVKCNEQPNRVEIYEKTVEVLEPEVTKL ${\tt MKFMYFQRKAIERFCSEVKRLCHAERRKDFVSEAYLLTLGKFINMFAVLDELKNMKCSVKNDHSAYKRAAQFLRK}$ MADPQSIQESQNLSMFLANHNRITQCLHQQLEVIPGYEELLADIVNICVDYYENKMYLTPSEKHMLLKVMGFGLY LMDGNVSNIYKLDAKKRINLSKIDKFFKQLQVVPLFGDMQIELARYIETSAHYEENKSKWTCTQSSISPQYNICE OMVQIRDDHIRFISELARYSNSEVVTGSGLDSQKSDEEYRELFDLALRGLQLLSKWSAHVMEVYSWKLVHPTDKF CNKDCPGTAEEYERATRYNYTSEEKFAFVEVIAMIKGLQVLMGRMESVFNQAIRNTIYAALQDFAQVTLREPLRQ AVRKKKNVLISVLQAIRKTICDWEGGREPPNDPCLRGEKDPKGGFDIKVPRRAVGPSSTQLYMVRTMLESLIADK SGSKKTLRSSLDGPIVLAIEDFHKQSFFFTHLLNISEALQQCCDLSQLWFREFFLELTMGRRIQFPIEMSMPWIL TDHILETKEPSMMEYVLYPLDLYNDSAYYALTKFKKQFLYDEIEAEVNLCFDQFVYKLADQIFAYYKAMAGSVLL DKRFRAECKNYGVIIPYPPSNRYETLLKQRHVQLLGRSIDLNRLITQRISAAMYKSLDQAISRFESEDLTSIVEL EWLLEINRLTHRLLCKHMTLDSFDAMFREANHNVSAPYGRITLHVFWELNFDFLPNYCYNGSTNRFVRTAIPFTQ EPORDKPANVOPYYLYGSKPLNIAYSHIYSSYRNFVGPPHFKTICRLLGYQGIAVVMEELLKIVKSLLQGTILQY VKTLIEVMPKICRLPRHEYGSPGILEFFHHQLKDIIEYAELKTDVFQSLREVGNAILFCLLIEQALSQEEVCDLL HAAPFONILPRVYIKEGERLEVRMKRLEAKYAPLHLVPLIERLGTPQQIAIAREGDLLTKERLCCGLSMFEVILT RIRSYLODPIWRGPPPTNGVMHVDECVEFHRLWSAMQFVYCIPVGTNEFTAEQCFGDGLNWVGCSIIVLLGQQRR FDLFDFCYHLLKVQRQDGKDEIIKNVPLKKMADRIRKYQILNNEVFAILNKYMKSVETDSSTVEHVRCFQPPIHQ SLATTC

1249/2682 FIGURE 1124

1250/2682 FIGURE 1125

LCNLGAMRNLYAMHRRLQRHPRSCTRDCAEPRADGREASPQPLEELDHLLLLALMTVLFTMCSLPVIYRAYYGAF KDVKEKNRTSEEAEDLRALRFLSVISIVDPWIFIIFRSPVFRIFFHKIFIRPLRYRSRCSNSTNMESSL

1251/2682 FIGURE 1126

GTGATCCCTGAGAGCCCTGGCACCACTTTAGGAGACGTGGTAGGTCACTCTGTACATGTTCTTCCTCAGCAAGGG TGGTTCCTTCCTATTTCTCCTTCAGAGTCAAGTTTCACCCCACAGGGAGTTCACGCTTCCATGTTGCCTCA TCCAGCCCTTCAGGAAGCCAGAGTCTGTGCTCCAGTGTGGCATTTCAGCCAACCTAGAAATGAAGGGTGACTTAG CACAGAGAGGTTCAACAAGTGGGGCATGCAGGCCACTGATCTCTGCAAGGGCAGCAGTGCCGGGGTGCTCTGGGA TACAGGCAGTGCCTTCGGAAAGAAGGGCAATTGAAGACAGTTGAGAAGGTGAACAAAGTTTACATCTAACAAATT TCTTGCTCTATTGCTCAGGCTGGAGTGCAGTGTTGCGATCTCGGCTCACTGCAGTCTCGACCTCCCAGGCTCAAT CGATCCTGCCACCTCAGCCTCTGGAGTAGCTGGGACTACCTGTAGGTGCCGTGCCACCACGCCCAGGTAATCTTTT ATTTTTTGTAGATACCAGTTATCCTATGTTGCCCAGGCTGGTCTCCAACTCCTGGGCTCAAGCAATCCTCCCACC TCAGCCTCCCTAAGTGCTGAGATTACAGGTGTGAGTCACTGTGCCCAGCCAACCTGGACTATTCTAAATTTTAAC AGTGCCTAAGAGAATCATGCTTAATTAAAAACTAGCTGGACGTGGTGGCTTACGCCTGTAATCCCAGCACTTTGG GAGGCCGAGATGGGCGGATCCCTTGATTCCAGGAGTTCGAGTCCAACCTGGGCAGCACGAAGAAACCCTCATCTC TACCAAAAATACAAAAATTAGCCAGGCATTGTGGTGTATACCTGTAGTCCCAGCTGCTTGGGAGGATGAGGCAGG TTCACTGTAGACCAATTTAAAACTATAGATAAACCAAAACAACAAACTTTTTCTTTTTTTAAGAGACGGAGTCT CGCTCTGTTGCCCAGGCTGGAGTGCAGTGGTGCAATCTCGGCTCGCTGCAACCTCAGCCTCCCAGGTTCTAGCAA CCAAAGCGCTGGGATTACAGGGGTGAGCCACCACACCCGGCCAAGAAACTTTAAATACTACCTAGAGACAATCCC TTTTAAAACTTTAGTGTATGTCTTTTTATACCATTTTCTAGGCTTCTAGGCTCATTTGCAAAAATGAGATACCAC TGTAAATACTTAATCTGTAAATTATCTTTTTCAGGAGTCTCTCTGAGTCTTCTGGCTCAGGGAGCTGTCCTATAA ATAGCTGTAATCCCACCACTTCGGGAGGTCAAGGTGGGAGGATTGCTTTAGCCCAGGAGTTTGAGACCAGCCTGG GGAACATAATGAGACCCATCTGTAAAAAAAGAAAATTAAATTCACCTTTAGTATTATCTTATTAAAATTCCATTG TGCATTTACACAATCATTTACCTTATCAGTCCCTTCAGAAGAACATTTAAGTTGTTATCACTTACATCCTTGCAG CTAAATCTTTGAGTACATCCTAATACCTGTCTGTTTTTAATGACCTATCTAAGGAATCCTTTGAAACCTATACAC TTAACCACTGTGTTAGCTAAGAGCCTCCAAAAAGGCTGGGTGTGGCGGCTCATGCCTGTAATCCCAGCACTTTGG GAGTCCGAGGCGAGTGAATCACTTGAGGTCAGGAGTTCGAGACCAGCCGGGCCAACATGGTGAAACCCCGTCTCT ACAAAAATGCAAAAATTAGTTGGGCATGGTGGCTCACTCCTGTAGTCCTGGCTACTCAGGAGGATAAGTGGAAG GATGGCTTAAGCTCAGGAGGTAGAGATTGCAATGAGCCGAGATTGTGCCACTGCACTACAACCTGGGCAACAGAG CCAGACCCTGTCTCAAAAAAAAAAAAAAAAAAAAAA

FIGURE 1127

 $\tt CTTGTCTCCCCTGGTTTGTGAAGTGCGGAAAACCAGAGGCGCAGTC{\color{red} ATG} TCGGGATTCGACGATCCTGGCATTTT$ CTACAGCGACAGCTTCGGGGGGCGACGCCCAGGCCGACGAGGGCAGGCCCGCAAATCGCAGCTGCAGAGGCGCTT CAAGGAGTTCCTGCGGCAGTACCGAGTGGGCACCGACCGGCTTCACCTTCAAATACAGGGATGAACTCAA GCGGCATTACAACCTGGGGGAGTACTGGATTGAGGTGGAGATGGAGGATCTGGCCAGCTTTGATGAGGACCTGGC \cdot CGACTACTTGTACAAGCAGCCAGCCGAGCACCTGCAGCTGCTGGAGGAAGCTGCCAAGGAGGTAGCTGATGAGGT GACCCGGCCCCGGCCTTCTGGGGAGGAGGTGCTCCAGGACATCCAGGTCATGCTCAAGTCGGACGCCAGCCCTTC CAGCATTCGTAGCCTGAAGTCGGACATGATGTCACACCTGGTGAAGATCCCTGGCATCATCATCGCGGCCTCTGC GGTCCGTGCCAAGGCCACCCGCATCTCTATCCAGTGCCGCAGCTGCCGCAACACCCCTCACCAACATTGCCATGCG CCCTGGCCTCGAGGGCTATGCCCTGCCCAGGAAGTGCAACACAGATCAGGCTGGGCGCCCCAAATGCCCATTGGA CCCGTACTTCATCATGCCCGACAAATGCAAATGCGTGGACTTCCAGACCCTGAAGCTGCAGGAGCTGCCTGATGC AGTCCCCCACGGGGAGATGCCCAGACACATGCAGCTCTACTGCGACAGGTACCTGTGTGACAAGGTCGTCCCTGG GAACAGGGTTACCATCATGGGCATCTACTCCATCAAGAAGTTTGGCCTGACCACCAGCAGGGGCCGTGACAGGGT GGGCGTGGGCATCCGAAGCTCCTACATCCGTGTCCTGGGCATCCAGGTGGACACAGATGGCTCTGGCCGCAGCTT TGCTGGGGCCGTGAGCCCCCAGGAGGAGGAGGAGTTCCGTCGCCTGGCTGCCCTCCCAAATGTCTATGAGGTCAT CTCCCGAAAGAGGCTCCCTGATGGACTTACTCGCCGAGGAGACATCAACCTGCTGATGCTAGGGGACCCTGGGAC AGCCAAGTCCCAGCTTCTGAAGTTTGTGGAGAAGTGTTCTCCCATTGGGGTATACACGTCTGGGAAAGGCAGCAG CGCAGCTGGACTGACAGCCTCGGTGATGAGGGACCCTTCGTCCCGGAATTTCATCATGGAGGGCGGAGCCATGGT CCTGGCCGATGGTGGGGTCGTCTGTATTGACGAGTTTGACAAGATGCGAGAAGATGACCGTGTGGCAATCCACGA AGCCATGGAGCAGCAGACCATCTCTATCGCCAAGGCTGGGATCACCACCCTGAACTCCCGCTGCTCCGTCCT GGCTGCTGCCAACTCAGTGTTCGGCCGCTGGGATGAGACGAAGGGGGAGGACAACATTGACTTCATGCCCACCAT CTTGTCGCGCTTCGACATGATCTTCATCGTCAAGGATGAGCACAATGAGGAGGGATGTGATGCTGGCCAAGCA TGTCATCACTCTGCACGTGAGCGCACTGACACAGACACAGGCTGTGGAGGGCGAGATTGACCTGGCCAAGCTGAA GAAGTTTATTGCCTACTGCCGAGTGAAATGTGGCCCCCGGCTGTCAGCAGAGGCTGCAGAGAAACTGAAGAACCG CTACATCATCATGCGGAGGGGGCCCGTCAGCACGAGGGGACAGTGACCGCCGCTCCAGCATCCCCATCACTGT GCGGCAGCTGGAGGCCATTGTGCGCATCGCGGAAGCCCTCAGCAAGATGAAGCTGCAGCCCTTCGCCACAGAGGC AGATGTGGAGGAGGCCCTGCGGCTCTTCCAAGTGTCCACGTTGGATGCTGCCTTGTCCGGTACCCTGTCAGGGGT GGAGGGCTTCACCAGCCAGGAGGACCAGGAGATGCTGAGCCGCATCGAGAAGCAGCTCAAGCGCCGCTTTGCCAT TGGCTCCCAGGTGTCTGAGCACAGCATCATCAAGGACTTCACCAAGCAGAAATACCCGGAGCACGCCATCCACAA GGTGCTGCAGCTCATGCTGCGGCGCGAGATCCAGCATCGCATGCAGCGCAAGGTTCTCTACCGCCTCAAG<u>TG</u> TGTAGTGTCCTGCTGCCTCTGGGCGCCCCCCTCTAGCGCGGTTCTGGGAAGTGTGCTTTTTGGCATCCGTTAATAA TAAAGCCACGGTGTGTTCAGGTAAAAAAAAAAAAAAAA

1253/2682 FIGURE 1128

MSGFDDPGIFYSDSFGGDAQADEGQARKSQLQRRFKEFLRQYRVGTDRTGFTFKYRDELKRHYNLGEYWIEVEME DLASFDEDLADYLYKQPAEHLQLLEEAAKEVADEVTRPRPSGEEVLQDIQVMLKSDASPSSIRSLKSDMMSHLVK IPGIIIAASAVRAKATRISIQCRSCRNTLTNIAMRPGLEGYALPRKCNTDQAGRPKCPLDPYFIMPDKCKCVDFQ TLKLQELPDAVPHGEMPRHMQLYCDRYLCDKVVPGNRVTIMGIYSIKKFGLTTSRGRDRVGVGIRSSYIRVLGIQ VDTDGSGRSFAGAVSPQEEEEFRRLAALPNVYEVISKSIAPSIFGGTDMKKAIACLLFGGSRKRLPDGLTRRGDI NLLMLGDPGTAKSQLLKFVEKCSPIGVYTSGKGSSAAGLTASVMRDPSSRNFIMEGGAMVLADGGVVCIDEFDKM REDDRVAIHEAMEQQTISIAKAGITTTLNSRCSVLAAANSVFGRWDETKGEDNIDFMPTILSRFDMIFIVKDEHN EERDVMLAKHVITLHVSALTQTQAVEGEIDLAKLKKFIAYCRVKCGPRLSAEAAEKLKNRYIIMRSGARQHERDS DRRSSIPITVRQLEAIVRIAEALSKMKLQPFATEADVEEALRLFQVSTLDAALSGTLSGVEGFTSQEDQEMLSRI EKQLKRRFAIGSQVSEHSIIKDFTKQKYPEHAIHKVLQLMLRRGEIQHRMQRKVLYRLK

FIGURE 1129

GACAGCGCCGAGTTGGCGGCTGAGCTGGGCATGGAGCACCAGGCGGTGGTGGGCGCCGTGAAGAGCCTTCAGGCG $\tt CTGGGCGAGGTCATCGAGGCTGAACTTCGGTCCACCAAGCACTGGGAGGTTACTGCGGAGGGCGAGGAGATTGCC$ GGCCACCTTCACCCGCTGCTCAAGGTCCGCTCCCAGTTCCGACAGATCTTCCTGGAGATGGGGTTCACCGAGATG CCGACTGATAACTTCATTGAGAGCTCCTTCTGGAACTTTGACGCCCTCTTCCAGCCCCAGCAGCACCCAGCCCGT GACCAGCACGACACCTTCTTCCTTCGAGATCCAGCGGAGGCCCTGCAGCTCCCAATGGACTATGTCCAGCGGGTC AAGCGGACCCACTCTCAGGGCGGCTACGGCTCACAGGGGTACAAGTATAACTGGAAGCTGGACGAGGCCCGGAAA AACCTACTGCGAACCCACACCACATCAGCCAGCGCCCGTGCGCTCTACCGCCTTGCCCAGAAGAAGCCCTTCACT $\tt CCGGTCAAGTACTTCTCCATCGACCGCGTATTCCGGAATGAGACCCTGGACGCCACGCACCTGGCTGAGTTCCAC$ ${\tt CAGATCGAGGGCGTGGTGGCGGATCATGGTCTCACCTTGGGCCACCTCATGGGCGTTCTGCGGGAGTTCTTCACC}$ AAGCTGGGTATCACGCAACTCCGCTTCAAGCCAGCCTACAACCCATACACAGAGCCCAGCATGGAGGTGTTCAGC TACCACCAAGGCCTGAAGAAGTGGGTGGAGGTCGGAAACTCGGGGGTCTTCCGTCCAGAGATGCTGCCCATG GGGCTTCCCGAGAACGTGTCGGTCATTGCCTGGGGCCTCTCCCTGGAGCGCCCAACGATGATCAAATATGGCATC AACAATATCCGGGAGCTGGTGGGCCACAAGGTGAACCTGCAGATGGTGTATGACAGTCCCCTGTGCCGCCTGGAT GCCGAGCCGAGGCCCCTCCCACACAGGAGGCTGCGTGACATGGGCCACTCTAGGACAGGTCATCCTCCCCGAGT $\verb|CCCTGCTGCTGCCTCTTTGCATCCCTGGCCAGTGACCTTGTATTTATGAGGCTCTGTGAGGCCAGCCCCCACC| \\$ TTCCTCTTTCCCACCTGTCCCAGGACCAGAATCCCAGGGACAGAGGACTGGGTAGCAGGTTCCTTCTGTTGTCCT GTGTGGTGTCTACTGTGAGGGTGGCCCTGAGGAGACCTGTGGGCCACCTATTGTCTAATAAAGTGGGCAGTT GCCCCCA

1255/2682 FIGURE 1130

MADGQVAELLLRRLEASDGGLDSAELAAELGMEHQAVVGAVKSLQALGEVIEAELRSTKHWELTAEGEEIAREGS HEARVFRSIPPEGLAQSELMRLPSGKVGFSKAMSNKWIRVDKSAADGPRVFRVVDSMEDEVQRRLQLVRGGQAEK LGEKERSELRKRKLLAEVTLKTYWVSKGSAFSTSISKQETELSPEMISSGSWRDRPFKPYNFLAHGVLPDSGHLH PLLKVRSQFRQIFLEMGFTEMPTDNFIESSFWNFDALFQPQQHPARDQHDTFFLRDPAEALQLPMDYVQRVKRTH SQGGYGSQGYKYNWKLDEARKNLLRTHTTSASARALYRLAQKKPFTPVKYFSIDRVFRNETLDATHLAEFHQIEG VVADHGLTLGHLMGVLREFFTKLGITQLRFKPAYNPYTEPSMEVFSYHQGLKKWVEVGNSGVFRPEMLLPMGLPE NVSVIAWGLSLERPTMIKYGINNIRELVGHKVNLQMVYDSPLCRLDAEPRPPPTQEAA

1256/2682 FIGURE 1131

GAATTCGGGCGTGGGCGCGGGGGCGCGCGCGCACGCTGCAGGGCTGAAGCGGCGGCGGCGGTGGGGACTGC TCTGTATTCCTCTAGTGATGATGTGATCGAATTAACTCCATCAAATTTCAACCGAGAAGTTATTCAGAGTGATAG TTTGTGGCTTGTAGAATTCTATGCTCCATGGTGTGGTCACTGTCAAAGATTAACACCAGAATGGAAGAAAGCAGC AACTGCATTAAAAGATGTTGTCAAAGTTGGTGCAGTTGATGCAGATAAGCATCATTCCCTAGGAGGTCAGTATGG TGTTCAGGGATTTCCTACCATTAAGATTTTTGGATCCAACAAAAACAGACCAGAAGATTACCAAGGTGGCAGAAC TGGTGAAGCCATTGTAGATGCTGCGCTGAGTGCTCTGCGCCAGCTCGTGAAGGATCGCCTCGGGGGACGGAGCGG AGGATACAGTTCTGGAAAACAAGGCAGAAGTGATAGTTCAAGTAAGAAGGATGTGATTGAGCTGACAGACGACAG CTTTGATAAGAATGTTCTGGACAGTGAAGATGTTTGGATGGTTGAGTTCTATGCTCCTTGGTGTGGACACTGCAA AAACCTAGAGCCAGAGTGGGCTGCCGCAGCTTCAGAAGTAAAAGAGCAGACGAAAGGAAAAGTGAAACTGGCAGC TGTGGATGCTACAGTCAATCAGGTTCTGGCCTCCCGATACGGGATTAGAGGATTTCCTACAATCAAGATATTTCA GAAAGGCGAGTCTCCTGTGGATTATGACGGTGGGCGGACAAGATCCGACATCGTGTCCCGGGCCCTTGATTTGTT TTCTGATAACGCCCCACCTCCTGAGCTGCTTGAGATTATCAACGAGGACATTGCCAAGAGGACGTGTGAGGAGCA TCTTCTGAAGTTGGCAGACAAATACAAAAAGAAAATGTGGGGGTGGCTGTGGACAGAAGCTGGACCCAGTCTGA ACTTGAGACCGCGTTGGGGATTGGAGGGTTTGGGTACCCCGCCATGCCCGCCATCAATGCACGCAAGATGAAATT TGCTCTGCTAAAAGGCTCCTTCAGTGAGCAAGGCATCAACGAGTTTCTCAGGGAGCTCTCTTTTGGGCGTGGCTC CACGGCACCTGTAGGAGGCGGGCTTTCCCTACCATCGTTGAGAGAGCCTTGGGACGCCAGGGATGGCGAGCT ACAGAGGCTTCAGACCATTTTCTTTCTTGGGAGCCAGTGGATTTTTCCAGCAGTGAAGGGACATTCTCTACTTT $\verb|CTTTTCTTGGGAGCCAGTGGATTTTTCCAGCAGTGAAGGGACATTCTCTACACTCAGATGACTCTACCAGTGGCC| \\$ TTTTAACCAAGAAGTAGTACTTGATTGGTCATTTGAAAACACTGCAACAGTGAACTTTTGCATCTCAAGAAAACA TTGAAAAATTCTATGAATTGTTGTAGCCGGTGAATTGAGTCGTATTCTGTCACATAATATTTTGAAGAAAACTTG **GGAATTC**

1257/2682 FIGURE 1132

MALLYLGLVSCTFFLAVNGLYSSSDDVIELTPSNFNREVIQSDSLWLVEFYAPWCGHCQRLTPEWKKAATALKDV VKVGAVDADKHHSLGGQYGVQGFPTIKIFGSNKNRPEDYQGGRTGEAIVDAALSALRQLVKDRLGGRSGGYSSGK QGRSDSSSKKDVIELTDDSFDKNVLDSEDVWMVEFYAPWCGHCKNLEPEWAAAASEVKEQTKGKVKLAAVDATVN QVLASRYGIRGFPTIKIFQKGESPVDYDGGRTRSDIVSRALDLFSDNAPPPELLEIINEDIAKRTCEEHQLCVVA VLPHILDTGAAGRNSYLEVLLKLADKYKKKMWGWLWTEAGAQSELETALGIGGFGYPAMAAINARKMKFALLKGS FSEQGINEFLRELSFGRGSTAPVGGGAFPTIVEREPWDGRDGELPVEDDIDLSDVELDDLGKDEL

FIGURE 1133

TAGATGGCAACCTCCCTATCTGCCCGCAGGTCATAGAGGCGACACGTAGCGTCATCTGACCCTGAAGCAAAGGCA ${\tt TCTCCACTCCAAAGTTAGACAAA} \underline{{\tt ATG}} {\tt CCAGGAATGTTCTTCTCTGCTAACCCAAAGGAATTGAAAGGAACCACTC}$ ATTCACTTCTAGACGACAAAATGCAAAAAAGGAGGCCAAAGACTTTTGGAATGGATATGAAAGCATACCTGAGAT CTATGATCCCACATCTGGAATCTGGAATGAAATCTTCCAAGTCCAAGGATGTACTTTCTGCTGCTGAAGTAATGC AATGGTCTCAATCTCTGGAAAAACTTCTTGCCAACCAAACTGGTCAAAATGTCTTTGGAAGTTTCCTAAAGTCTG AATTCAGTGAGGAGAATATTGAGTTCTGGCTGGCTTGTGAAGACTATAAGAAAACAGAGTCTGATCTTTTGCCCT GTAAAGCAGAAGAGATATATAAAGCATTTGTGCATTCAGATGCTGCTAAACAAATCAATATTGACTTCCGCACTC GAGAATCTACAGCCAAGAAGATTAAAGCACCAACCCCCACGTGTTTTGATGAAGCACAAAAAGTCATATATACTC TTATGGAAAAGGACTCTTATCCCAGGTTCCTCAAATCAGATATTTACTTAAATCTTCTAAATGACCTGCAGGCTA ATAGCCTAAAG**TGA**CTGGTCCCTGGCTGAAGGGAATTAACAGATAGTATCAAGGCACGAAGGAATGTGCCAGTAT GGCTCCCTGGGTGAACAGCTTGGCCTTTTTTGGGTGTCTTGACAGGCCAAGAAGAACAAATGACTCAGAATGGAT TAACATGAAAGTTATCCAGGCGCAGAGTTGAAGAAGCATAAGCAAGACAAAAACAGAGAGACCGCAGAAGGAGGA AGATACTGTGGTACTGTCATAAAAAACAGTGGAGCTCTGTATTAGAAAGCCCCTCAGAACTGGGAAGGCCCAGGTA ACTCTAGTTACACAGAAACTGTGACTAAAGTCTATGAAACTGATTACAACAGGCTGTAAGAATCAAAGTCAACTG **ACATCTATGCTACATATTATTATATATGTTTGTACTGAGCTATTGAAGTCCCATTAACTTAAAGTATATGTTTTCA** AATTGCCATTGCTACTATTGCTTGTCGGTGTATTTTATTTTATTGTTTTTGACTTTGGAAGAGATGAACTGTGTA TTTAACTTAAGCTATTGCTCTTAAAACCAGGGATCAGAATATATTTGTAAGTTAAATCATTGGTGCTAATAATAA ATGTGGATTTTGTATTAAAATATATAGAAGCAATTTCTGTTTACATGTCCTTGCTACTTTTAAAAACTTGCATTT

1259/2682 FIGURE 1134

MPGMFFSANPKELKGTTHSLLDDKMQKRRPKTFGMDMKAYLRSMIPHLESGMKSSKSKDVLSAAEVMQWSQSLEK LLANQTGQNVFGSFLKSEFSEENIEFWLACEDYKKTESDLLPCKAEEIYKAFVHSDAAKQINIDFRTRESTAKKI KAPTPTCFDEAQKVIYTLMEKDSYPRFLKSDIYLNLLNDLQANSLK

1260/2682 FIGURE 1135

 ${\tt GAATTCCGGCAGGCACAAACTCATCCCATTGATTGGAAGAACAACG{\color{red} {\bf ATG}} {\tt ACTCCTGGGAAGACCTCAT} \\$ TGGTGTCACTGCTGCTGCTGAGCCTGGAGGCCATAGTGAAGGCAGGAATCACAATCCCACGAAATCCAGGAT GCCCAAATTCTGAGGACAAGAACTTCCCCCGGACTGTGATGGTCAACCTGAACATCCATAACCGGAATACCAATA CCAATCCCAAAAGGTCCTCAGATTACTACAACCGATCCACCTCACCTTGGAATCTCCACCGCAATGAGGACCCTG AGAGATATCCCTCTGTGATCTGGGAGGCAAAGTGCCGCCACTTGGGCTGCATCAACGCTGATGGGAACGTGGACT ACCACATGAACTCTGTCCCCATCCAGCAAGAGATCCTGGTCCTGCGCAGGGAGCCTCCACACTGCCCCAACTCCT TCTGGGGAGCCCACACTCCCCAAAGCAGTTAGACTATGGAGAGCCGACCCAGCCCCTCAGGAACCCTCATCCTTC AAAGACAGCCTCATTTCGGACTAAACTCATTAGAGTTCTTAAGGCAGTTTGTCCAATTAAAGCTTCAGAGGTAAC TTCTTGTTTACTTTTTTAAGGGCTTTAAGTTATTTATGTATTTAATATGCCCTGAGATAACTTTGGGGTATAAGA TTCCATTTTAATGAATTACCTACTTTATTTTGTTTGTCTTTTTAAAGAAGATAAGATTCTGGGCTTGGGAATTTT ATTATTTAAAAGGTAAAACCTGTATTTATTTGAGCTATTTAAGGATCTATTTATGTTTAAGTATTTAGAAAAAAGG TGAAAAAGCACTATTATCAGTTCTGCCTAGGTAAATGTAAGATAGAATTAAATGGCAGTGCAAAATTTCTGAGTC CCTACTTTCATATGTATTAAATTTTTGCAATTTGTTGAGGTTTTACAAGAGATACAGCAAGTCTAACTCTC TGTTCCATTAAACCCTTATAATAAAATCCTTCTGTAATAATAAAGTTTCAAAAGAAAATGTTTATTTGTTCTCAT TAAATGTATTTTAGCAAACTCAGCTCTTCCCTATTGGGAAGAGTTATGCAAATTCTCCTATAAGCAAAACAAAGC ATGTCTTTGAGTAACAATGACCTGGAAATACCCAAAATTCCAAGTTCTCGATTTCACATGCCTTCAAGACTGAAC ACCGACTAAGGTTTTCATACTATTAGCCAATGCTGTAGACAGAAGCATTTTGATAGGAATAGAGCAAATAAGATA ATGGCCCTGAGGAATGGCATGTCATTATTAAAGATCATATGGGGAAAATGAAACCCTCCCCAAAATACAAGAAGT TCTGGGAGGAGACATTGTCTTCAGACTACAATGTCCAGTTTCTCCCCTAGACTCAGGCTTCCTTTGGAGATTAAG AAGGCACCACAACCCAGAAAGGAGCTGATGGGGCAGAATGAACTTTAAGTATGAGAAAAGTTCAGCCCAAGTA AAATAAAAACTCAATCACATTCAATTCCAGAGTAGTTTCAAGTTTCACATCGTAACCATTTTCGCCCGGAATTC

1261/2682 FIGURE 1136

 ${\tt MTPGKTSLVSLLLLLSLEAIVKAGITIPRNPGCPNSEDKNFPRTVMVNLNIHNRNTNTNPKRSSDYYNRSTSPWN\\ LHRNEDPERYPSVIWEAKCRHLGCINADGNVDYHMNSVPIQQEILVLRREPPHCPNSFRLEKILVSVGCTCVTPI\\ VHHVA$

FIGURE 1137A

GGCACGAGGCACGTGGGTTCTGAGCGTGTTTCTACGTCCCTGGAAGCCGGTCATTTAAGCTCATTCCTCGCCACG GCTTAGTCAAC<u>ATG</u>GGTCGCTCGGGAAAGTTGCCCTCTGGTGTCTCAGCTAAGTTGAAGCGCTGGAAGAAAGGCC GAAGGAGTGACCTGACAGTCGATGCTGTGAAGTTACATAATGAGCTGCAGTCAGGGTCCTTGCGCTTGGGCAAAA GCGAAGCCCCGGAGACGCCCATGGAAGAAGAGGCGGAGCTGGTTCTCACCGAGAAGTCCTCGGGTACCTTCCTGA GTGGCCTTTCCGACTGCACAAACGTCACCTTCAGCAAAGTACAGCGCTTCTGGGAGTCCAACTCGGCTGCCCACA ACTTCGCTGCTCTGATGACAACAATGGAAGCAGTGGAGTCCCCGGAGTCCCTGGCCGCCGTTGCTTACCTGCTGA ACCTTGTCCTGAAGCGTGTTCCCAGCCCTGTGCTTATTAAGAAGTTCTCTGATACCTCCAAAGCCTTCATGGATA GGAAGCAAGACCTGGAGGCCTGGGGCTACCCCGTGACCCTTCAGGTGTACCATGGGCTGCTGAGCTTCACGGTGC ATCCCAAGCCCAAGATCCGGAAGGCTGCCCAGCATGGAGTATGCTCAGTCCTCAAGGGCAGTGAATTCATGTTTG AAAAGGCCCCTGCCCATCATCCTGCCGCTTTCCACTGCCAAGTTCTGCATCCAGGAGATTGAGAAGTCTGGAG GCTCCAAGGAGGCCACCACCACGCTGCACATGCTGACGCTGCTGAAGGACCTGCTGCCCTGCTTCCCGGAAGGCC TGGTGAAGAGCTGCAGTGAGACTCTCCTCAGGGTCATGACCTTGAGCCATGTGCTGGTGACAGCCTGTGCCATGC AGGCCTTTCACAGCCTCTTCCACGCCAGGCCTGGCCTGAGCACCCTGTCAGCAGAGCTCAACGCCCAGATCATCA CGGCCCTGTACGACTATGTTCCCAGTGAGAATGATTTACAACCCCTGCTAGCCTGGCTTAAGGTCATGGAGAAAG CCTGCCTCCTTTCCCCACACTCGCAAGTGCTGACTGCTGCTACGCAGAGCCTCAAGGAGATCCTGAAGGAATGCG TGGCTCCCCACATGGCTGACATTGGCTCCGTGACCTCCTCGGCCTCAGGCCCTGCCCAATCTGTTGCCAAGATGT TCAGGGCAGTGGAGGAGGGCCTGACGTACAAATTCCATGCGGCCTGGAGCTCCGTGTTGCAGCTGCTGTGTCT TCTTCGAGGCGTGTGGGAGACAGGCCCACCCTGTGATGAGGAAGTGCCTCCAGTCCCTGTGTGACCTGCGCCTCT CCCCTCATTTCCCCCACACGGCGGCTCTTGACCAGGCAGTGGGGGGCTGCGGTGACCAGTATGGGACCTGAGGTGG TCATCCGAGACCATGTTCAGGAAACGCGACTTGGTTTTTTCACCACCTACTTCTTGCCCCTGGCTAACACCCTGA AGAGCAAAGCCATGGACCTGGCTCAGGCAGGCAGCACAGTGGAATCTAAGATCTACGACACACTCCAGTGGCAGA TGTGGACACTCCTGCCTGGGTTCTGCACAAGGCCTACAGATGTGGCCATCTCCTTCAAAGGGCTGGCACGGACGC TGGGCATGGCCATCAGCGAGCGTCCAGACCTGAGGGTCACCGTGTGCCAGGCCCTGCGCACCCTCATCACCAAGG GCTGCCAGGCAGAGGCTGACCGTGCTGAAGTGAGTCGCTTTGCCAAGAACTTTCTGCCGATCCTCTTCAACCTGT ATGGGCAGCCCGTGGCAGCCGGGGACACTCCAGCCCCTCGCCGGGCTGTGCTGGAAACCATCAGAACTTACCTCA CCATCACTGACACTCAGTTGGTGAACAGTCTCCTGGAAAAAGCCAGTGAGAAGGTGCTCGACCCTGCCAGCTCTG ACTTTACCAGATTGTCTGTCCTGGACCTGGTCGTGGCCTTGGCTCCGTGTGCTGACGAAGCTGCCATCAGTAAGC TATACTCCACCATCCGGCCCTACCTAGAGAGCCAAGGCCCACGGGGTGCAGAAGAAGACCCTACCGAGTGCTGGAGG AGGTGTGTGCCAGTCCTCAGGGCCCCCGGGGCCCTCTTCGTGCAGAGCCCACCTGGAGGACCTGAAGAAGACACTGC TGGACTCGCTGCGGAGCACCTCCTCACCCGCCAAGAGGCCCCGTTTGAAGTGCCTCCTACACATCGTGAGGAAGC TCTCAGCTGAACACAAGGAGTTCATCACTGCCCTCATCCCAGAGGTGATCCTGTGCACCAAGGAGGTGTCGGTGG GCGCACGGAAGAACGCTTTTGCACTGCTCGTGGAGATGGGCCATGCTTTCCTAAGGTTTGGCTCGAACCAGGAAG AGGCCCTGCAGTGCTACCTCGTCCTGATCTACCCTGGCCTGGTGGGCGCGGTGACCATGGTCAGCTGCAGCATCC TGGCCCTGACCCACCTCCTTTTCGAGTTTAAAGGTCTGATGGGGACCAGTACAGTGGAGCAGCTGCTGGAGAATG TGTGCCTGCTTCTGGCCTCCCGCACCCGTGACGTGGTCAAGTCTGCACTGGGCTTCATCAAGGTGGCAGTGACTG TCATGGACGTGGCGCACCTGGCCAAACATGTGCAGCTGGTGATGGAAGCCATTGGGAAGCTTTCAGATGACATGC GGCGGCACTTCCGCATGAAGCTTCGGAACCTGTTCACCAAGTTCATCCGCAAGTTTGGATTTGAGCTGGTGAAAA GGCTGTTGCCCGAGGAGTACCACAGAGTCCTGGTCAACATCCGGAAAGCTGAGGCCCGGGCCAAGAGGCACCGAG CCCTGAGCCAGGCTGCCGTGGAGGAGGAGAAGAAGAGGAGGAGGAGGAGGAGGAGCCCGCCCAGGGCAAAGGTGACA GCATTGAGGAGATTTTAGCTGACTCAGAGGACGAGGAGGACAATGAGGAGGAGGAAAGAAGCCGAGGCAAGGAGC ATCCCAAGGTGGCCCAACGAGTCCTGGCCACGCAGCCAGGCCAGGCCGGGGCAGGAAGAAGGACCACAGCTTCA AGGTGAGCGCCGATGGCCGGCTGATCATAAGGGAGGAGGCAGACGGCAACAAGATGGAGGAAGAAGATGCAA

1263/2682 FIGURE 1137B

1264/2682 FIGURE 1138

 ${\tt MGRSGKLPSGVSAKLKRWKKGHSSDSNPAICRHRQAARSRFFSRPSGRSDLTVDAVKLHNELQSGSLRLGKSEAP}$ ETPMEEEAELVLTEKSSGTFLSGLSDCTNVTFSKVQRFWESNSAAHKEICAVLAAVTEVIRSOGGKETETEYFAA $\verb|Lmtimeavespesiaavay| \verb|Lntvlkrvpspvlikkfsdtskafmdimsaqassgstsvlrwvlsclatllrkqd|$ LEAWGYPVTLQVYHGLLSFTVHPKPKIRKAAQHGVCSVLKGSEFMFEKAPAHHPAAISTAKFCIOEIEKSGGSKE ATTTLHMLTLLKDLLPCFPEGLVKSCSETLLRVMTLSHVLVTACAMQAFHSLFHARPGLSTLSAELNAQIITALY DYVPSENDLQPLLAWLKVMEKAHINLVRLQWDLGLGHLPRFFGTAVTCLLSPHSQVLTAATQSLKEILKECVAPH MADIGSVTSSASGPAQSVAKMFRAVEEGLTYKFHAAWSSVLQLLCVFFEACGRQAHPVMRKCLQSLCDLRLSPHF PHTAALDQAVGAAVTSMGPEVVLQAVPLEIDGSEETLDFPRSWLLPVIRDHVOETRLGFFTTYFLPLANTLKSKA ${\tt MDLAQAGSTVESKIYDTLQWQMWTLLPGFCTRPTDVAISFKGLARTLGMAISERPDLRVTVCQALRTLITKGCQAICTLITKGCAICTLITKGCAICTLITKGCAICTLITKGCAICTLITKGCAICTLITKGCAICTLITKGCAICTLITKGCAICTLITKGCAICTLITKGCAICTLITKGCAICTLITKGCAICTLITKGCAICTLITKGCAICTLITKGCAICTLITKGCAICTLITKGCAICTLITKGCAICTLITKGCAICTLITCAICTLITKGCAICTLITKGCAICTLITKGCAICTLITKGCAICTLITKGCAICTLITKGCAICTLITKGCAICTLITKGCAICTLITKGCAICTLITCAICTLITKGCAICTLITCAI$ EADRAEVSRFAKNFLPILFNLYGQPVAAGDTPAPRRAVLETIRTYLTITDTOLVNSLLEKASEKVLDPASSDFTR $\verb|LSVLDLVVALAPCADEAA| | SKLYSTIRPYLESKAHGVQKKAYRVLEEVCASPQGPGALFVQSHLEDLKKTLLDSL| | SKLYSTIRPYLESKAHGVQKAYRVLEEVCASPQGPGALFVQSHLEDLKTLT| | SKLYSTIRPYLESKAHGVQSHLEDLKTLT| | SKLYSTIRPYLESKAHGVQKAYRVLEEVCASPQGPGALFVQSHLEDLKTLT| | SKLYSTIRPYLESKAHGVQTATT| | SKLYSTIRPYLESKAHGVQTATT| | SKLYSTIRPYLESKAHGVQTATT| | SKLYSTIRPYLT| | SKLYSTIR$ RSTSSPAKRPRLKCLLHIVRKLSAEHKEFITALIPEVILCTKEVSVGARKNAFALLVEMGHAFLRFGSNOEEALO CYLVLIYPGLVGAVTMVSCSILALTHLLFEFKGLMGTSTVEQLLENVCLLLASRTRDVVKSALGFIKVAVTVMDV AHLAKHVQLVMEAIGKLSDDMRRHFRMKLRNLFTKFIRKFGFELVKRLLPEEYHRVLVNIRKAEARAKRHRALSO ${\tt AAVEEEEEEEEEPAQGKGDSIEEILADSEDEEDNEEEERSRGKEQRKLARQRSRAWLKEGGGDEPLNFLDPKV}$ AQRVLATQPGPGRGRKKDHSFKVSADGRLIIREEADGNKMEEEEGAKGEDEEMADPMEDVIIRNKKHOKLKHOKE AEEEELEIPPQYQAGGSGIHRPVAKKAMPGAEYKAKKAKGDVKKKGRPDPYAYIPLNRSKLNRRKKMKLQGQFKG LVKAARRGSQVGHKNRRKDRRP

1265/2682 FIGURE 1139

1266/2682 FIGURE 1140

AGGAGGGTGCCTACTCCGGGAGCTGCTACCATCGAGATGGCTTACGGCTGAGTATACAGTTTGAGGTGAGGCGGG GCCTGGTGGAAGTGCTCAGAGCCAGACCCTGGTTTGAGGAGCCCCCCAAGGCTGTGGAACTGGAGGGGTTGGCGG CCTGTGAGGGCGAGTACTCCCAAAAGTACAGTACCATGAGCCCGCTGGGCAGTGGGGCCTTCGGCTTCGTGTGGA CTGCTGTGGACAAGGAAAAAAACAAGGAGGTGGTGGTGAAGTTTATTAAGAAGGAGAGGTCTTGGAGGATTGTT GGATTGAGGATCCCAAACTTGGGAAAGTTACTTTAGAGATCGCAATTCTATCCAGGGTGGAGCACGCCAATATCA TCAAGGTATTGGATATATTTGAAAACCAAGGGTTCTTCCAGCTTGTGATGGAGAAGCACGGCTCCGGCCTAGACC TCTTCGCTTTCATCGACCGCCACCCCAGGCTGGATGAGCCCCTGGCGAGCTACATCTTCCGACAACTAGTGTCAG CAGTGGGATACCTGCGCTTGAAGGACATCATCCACCGTGACTTCAAGGATGAGAACATCGTGATCGCCGAGGACT TCACAATCAAGCTGATAGACTTTGGCTCGGCCGCCTACTTGGAAAGGGGAAAATTATTTTATACTTTTTGTGGGA CCATCGAGTACTGTGCACCGGAAGTTCTCATGGGGAATCCCTACAGAGGGCCGGAGCTGGAGATGTGGTCTCTGG GAGTCACTCTGTACACGCTGGTCTTTGAGGAGAACCCCTTCTGTGAGCTGGAGGAGACCGTGGAGGCTGCCATAC ACCCGCCATACCTGGTGTCCAAAGAACTCATGAGCCTTGTGTCTGGGCTGCTGCAGCCAGTCCCTGAGAGACCCA CCACCTTGGAGAAGCTGGTGACAGACCCGTGGGTAACACAGCCTGTGAATCTTGCTGACTATACATGGGAAGAGG TGTTTCGAGTAAACAAGCCAGAAAGTGGAGTTCTGTCCGCTGCGAGCCTGGAGATGGGGAACAGGAGCCTGAGTG ATGTGGCCCAGGCTCAGGAGCTTTGTGGGGGCCCCGTTCCAGGCGAGGCTCCTAATGGCCAAGGCTGTTTGCATC CCGGGGATCCCCGTCTGCTGACCAGCTAAACACCAATTTCTTCCTGCTTTTCTCCACTTGGTTTGGAAAATCACA CAGTTTTCAGGCTCCATCTGTTTGGAGAAAATACATTCTGAAGCATCCCCAATTCACCTTCTAAAAACTCATGTG CAGGTTTGATAAACACCAGAACAGAAGACAGTGATGCTGTATTATTTTAGATTTATTACATAGATTTGGAATTCA CTTTTTTCATGACCTAGAAAAAAACATTCCAGTGTTCAACTGTTTTATATTATAAAGGGCTTTTAATTTGTGAA CTTCTGAAGGCATGAGTGTTTTCTCTTTCTACTTTTGTATATGTGCATGTTTTGTTTCCTCTGACTTGGTATATG Α

1267/2682 FIGURE 1141

1268/2682 FIGURE 1142

MVKLTAELIEQAAQYTNAVRDRELDLRGYKIPVIENLGATLDQFDAIDFSDNEIRKLDGFPLLRRLKTLLVNNNR ICRIGEGLDQALPCLTELILTNNSLVELGDLDPLASLKSLTYLSILRNPVTNKKHYRLYVIYKVPQVRVLDFQKV KLKERQEAEKMFKGKRGAQLAKDIARRSKTFNPGAGLPTDKKRGGPSPGDVEAIKNAIANASTLAEVERLKGLLQ SGQIPGRERRSGPTDDGEEEMEEDTVTNGS

1269/2682 FIGURE 1143A

CGGCCCGGCGGTAGGCGGTGGCGACTCTGCCCGCTCCCGTTTCGGCGCGGGTGACCGAGCGCCCGGGAGGCTCGAG ${\tt GACCGCATCGTGTGCCGTTGCGCCAAGCCCGGTCCTGCGCCGCC} \underline{{\tt ATG}}{\tt GCCCCAGTGCAGCTGGAGAACCACCAGC}$ TGGTCCCGCCGGAGGCGGCGGGGGGGGGGGGGGGGGGCCCCGGTCAGCCCCAGCCCCTCCTCCCCCGGGAGCCG CCGTGGCGGCCGCCTGCAGCTGCGGCTAGCCCGGGCTACCGGCTGAGCACCCTCATTGAATTTCTGCTGCACC GGGCCTACTCGGAGCTTATGGTGTTGACGGACCTACTGCCAAGGAAATCTGATGTGGAAAGGAAAATAGAAATAG TGCAGTTTGCTAGCCGGACACGCCAACTCTTCGTTCGATTATTAGCTTTAGTGAAATGGGCTAATAATGCTGGCA AAGTGGAAAATGTGCGATGATTTCAAGCTTTTTAGATCAGCAAGCCATCCTGTTTGTGGACACTGCTGATCGCC TAACTACTGGATCTTACCCACGGCTGCCAACCTGCATTAGGGATAAAATTATTCCTCCAGACCCAATTACCAAAA TTGAAAAACAAGCCACACCCATCAGCTGAATCAGATTCTTAGACATCGGCTTGTAACCACAGATCTTCCTCCTC AGTTAGCAAATCTTACAGTTGCAAATGGCCGGGTGAAGTTTCGTGTTGAAGGAGAATTTGAAGCCACCTTGACTG TGATGGGAGATGACCCTGATGTTCCATGGCGTCTTCTCAAGCTAGAAATTCTAGTTGAGGATAAGGAAACAGGAG AGAAACCTCTTCAGGATATGTACAACTGCCTACATTCTTTTCTGTTTATCACTTCAGTTAGAAGTGTTACATTCCC AAACTCTAATGTTAATCCGAGAACGGTGGGGAGACCTTGTGCAGGTGGAAAGGTATCATGCTGGAAAGTGCCTCT CCCTTTCAGTTTGGAATCAACAGGTTCTTGGGAGAAAAACTGGAACAGCATCTGTTCACAAAGTTACAATTAAAA TTGATGAGAATGATGTCTCCAAGCCTTTACAGATTTTTCACGATCCTCCTTTGCCAGCTTCTGATTCCAAATTAG TAGAAAGAGCCATGAAGATCGACCACTTATCAATAGAAAAACTCCTGATTGACAGTGTCCATGCAAGAGCTCATC AGAAGCTCCAAGAACTGAAGGCCATTCTTAGAGGCTTCAATGCCAATGAAAACTCTTCCATAGAGACTGCACTCC CAGCTCTTGTTGTTCCCATCTTGGAGCCCTGTGGTAATTCAGAGTGTCTGCACATTTTTGTAGATTTACATTCTG GAATGTTTCAATTGATGCTTTATGGACTTGACCAGGCCACTCTGGATGACATGGAGAAGTCTGTGAATGATA TGAAACGAATCATACCCTGGATTCAGCAACTTAAGTTTTGGCTTGGACAACAGCGTTGCAAGCAGTCTATAAAAC ATCTGCCTACGATAAGCAGTGAAACATTGCAGCTTTCCAATTACTCAACTCATCCTATTGGAAACCTTTCTAAGA ATAAACTGTTCATTAAACTTACCCGCCTTCCACAATACTACATTGTTGTGGAGATGTTGGAGGTTCCCAATAAAC CCACACACTGTCGTACAAGTACTACTTTATGTCTGTGAATGCTGCAGATCGTGAAGACAGCCCTGCAATGGCAT TGCTGCTGCAGCAGTTCAAGGAAAACATTCAGGACTTGGTTTTTCGTACAAAAACCGGGAAACAGACCAGAACCA ATGCCAAGCGCAAGTTGTCTGATGATCCATGTCCAGTAGAATCCAAGAAAACAAAACGAGCAGGAGAAATGTGTG CCTTCAATAAAGTTTTAGCCCACTTCGTCGCTATGTGTGATACAAATATGCCATTTGTAGGACTTCGGTTGGAGT TGTCCAATCTGGAGATTCCACATCAAGGAGTGCAAGTGGAAGGTGATGGCTTCAGCCATGCAATTCGCTTATTAA AAATTCCTCCCTGTAAGGGTATAACTGAGGAAACCCAAAAGGCTCTGGACCGCTCTCTTCTTGATTGCACTTTCC GATTACAAGGTAGAAATAACCGCACTTGGGTAGCAGAGTTAGTGTTTGCAAATTGTCCACTTAATGGCACTTCTA CTAGGGAGCAAGGACCATCCCGGCACGTTTACCTGACATATGAAAATCTGTTGTCTGAGCCTGTTGGTGGTAGAA CTCTACCAGACATACCTGCTCATCTAAATATTTTCTCAGAAGTTCGTGTTTATAATTACCGAAAACTTATCTTGT GTTATGGAACCACCAAGGGAAGCTCAATTAGTATCCAATGGAATTCGATCCATCAAAAATTCCACATTTCTTTGG GAACTGTTGGCCCAAACTCAGGTTGCAGTAACTGTCACAATACCATTCTCCATCAGCTTCAAGAAATGTTCAACA AAACACCAAATGTGGTTCAGTTATTACAGGTACTGTTTGATACTCAGGCTCCATTAAATGCCATCAACAAACTCC CCACTGTGCCGATGTTGGGCTTGACCCAGAGAACCAATACTGCCTACCAGTGCTTCTCCATTCTGCCACAGTCGT CCACCCACATCAGACTGGCCTTCAGGAACATGTATTGCATTGATATATACTGCCGGAGTCGAGGTGTTGTGGCAA TACGGGATGGTGCCTATAGTCTTTTTGATAACAGCAAACTAGTTGAAGGTTTCTATCCTGCACCAGGACTAAAGA CGTTCCTGAATATGTTTGTTGACAGCAATCAGGATGCTCGAAGAAGGTCTGTAAATGAGGACGATAATCCCCCTT CTCCTATAGGAGGAGATATGATGGATTCTTTAATATCGCAGCTCCAGCCACCCCCAGCAACAGCCATTTCCAA AGCAGCCAGGAACATCAGGTGCTTATCCTCTTACTTCACCCCCTACATCTTATCATAGCACAGTCAATCAGTCTC CCTCAATGATGCACACACGCTCCCAGGAAATCTGCATGCTGCCAGCTCCCCCAGTGGGGCTTTGAGAGCCCCAT CACCAGCGTCATTTGTTCCAACTCCTCCCCCATCCTCGCATGGAATCTCAATAGGACCAGGGGCCAGTTTTGCTA GTCCACATGGAACTCTTGACCCTAGTTCCCCATACACTATGGTGTCACCAAGTGGACGAGCAGGGAACTGGCCAG GATCTCCTCAAGTGTCTGGCCCCTCACCAGCAGCACGCATGCCTGGAATGTCACCAGCCAACCCCTCACTACATT

1270/2682 FIGURE 1143B

TGCTGCCCTCTCCAACTCCAGGCCTTGTGCCCGGCCTGGCAGGTAGTTACCTTTGTTCTCCACTTGAGAGATTCC TTGGATCAGTCATCATGAGACGACATCTTCAAAGAATTATTCAACAAGAAACGCTGCAGCTGATAAATTCTAATG TTCAGCTAAAATTGACACCTGAAAATGCAGGACAGTGGAAACCTGATGAACTTCAAGTTTTGGAGAAATTCTTTG AAACAAGAGTTGCAGGACCACCATTTAAAGCTAATACGTTAATAGCCTTCACCAAGCTATTAGGAGCTCCTACAC ACATCCTCAGGGATTGTGTGCACATTATGAAGCTGGAGCTGTTCCCTGACCAAGCAACACAGCTAAAATGGAATG TTCAGTTTTGCCTGACGATCCCTCCCAGCGCGCCGCCGATTGCACCTCCTGGGACGCCTGCTGTGGTGCTGAAAT CTCCCATGATGGTCAGCAACATTCTGAAGAGGTTTGCAGAGATGAATCCACCACGACAAGGTGAATGCACAATAT ${\tt TTGCAGCTGTTCGTGATTTAATGGCTAATCTTACACTGCCCCCTGTTGGGCGTCCA} {\tt TAG} {\tt ACACTATTGTTTTAA}$ ACCAGGAAGGCTGACAGATGAGACAACAAAAAAAATCTGAATTCAGCCTTCAGTTTAAAAAAAGGAAAAAGGACTTT TTTTTTAAACTTTAAGAGCTAAATATTCTAAACTGGCAAAAATTTTCAGGGTGCACTTCTTTCATCAAAATGATC TTTCTTATGTTTTGGGTGTAATAGTCCTTTTTTGGTTTTTGTTTTTTTAAGGCAGGTCTGTCATTTTTGAA TACTGTAAAACTGTGATAAACTTTATATTGAAGCTGTATTTTAATATGACCGCTTTGAATCCTTACATGAAATGT TCTGGGAGTTGTTATAAACACACCCCAAGGAAGCAATATTTAATAAAACTAGGTCAAAAAACAAAACAAAACAGTG AGTTATTAATTTATAATAATACATGTCTGAAATTTGACCAAAAACATCTTCTTTATGTCAAGGTTAATATTTT CTTCAGACATTCCTAACTTGACTAGTGGTTAACATTTAGCACCTTGGTTGTCTTTCAATATATAGGATTTGGGTG AAAAATAAGGAACTTAGTCTTTGAGAAGGGACAGTATGTGGTTCGTATTGATCAAGGATCCCAAATAATGCAATC ATTCTCATCTGTTGAGGATGTGGGAACTTTTCTGTCAGGAAAATTTAGTTTACAGAATACTTCTGCATACAACAT TATCCTCCTTTCCTTCCCCACCAAAATTGGGATTGTTCTAAACAATTTCAATTTAATTCATTGTCAACAAAACGA TAGAATGTTTTGCTTGGAAGAAACCTGGTCCATTCCCCTCATTGTGAAGAATCCCGAATCCTGGGCCTGTCCAGG GTCAAATGGAGTTTTTGGTATTAATACATCTCTGCAGGGTTTCTTTTTTGGAGCACTGTGCTGTCTTTCCTAGTCA GTCAGGGACTTTTTTAAGCTTCAAAGAACATGGTCTGATGCAAAGGTCTTCTACCGACTTCATGGTATTTAGGAA AAATTTTTAAGTGATAATACCATGCCGAGTTACCTGGTCACTGTAATACTGGTTCTCCATTAAAATGTAGATGCT TTGTCTAATTCCACTTCAAGATGATTTAATTGAGCTTCTATAACTATCAACTATCAAATTCTAGTTTCAAGTATC TCACTGTACCTATATCATATCTGTTCTCAACTTTGTTTGATTCTCCACTCATTTTCAATCAGAGTTGAAGCCTTC TTTGCCTTTCTTCTTTGTCTTATTTCTGCCTTCATCTCCCACTTCTCACCCAACTCTGCCACTGTTCAGGAGCAG TTGACTAAACTTTTATCCTTCCTTTAACTTAATCTTTTTATCCTTCTGTTTTTAGTTCTTACAGTGGTAATCACA AGAAATCTACATGTATATACAAGAAATGTATTTTTATCTGCAGGATAATATTGTTTCAAATAATTTTATTAAGAG TTAACTTTTTAGGTATTTTCCCTTTTAATGTGGTTTTGAAATGTTAATTGCATTTTTACACATGATGCATTCAGT GGACACTCTTTTTTCCTAATTATAACTCATCTCTGAATGCATTGTGCCAATCAAGAGTAAGATAGGATTCAGTGC GCAAAATTTGCTTTTGATGCTTATTAAGAGTAAACCCATGAATTTGAATTTTATATTATGCTTGGTACTTGGAA TTGATATATACCTTATTAAAGCTTGAAAACATTTAGCATTTGAATAGTAAGTTTCATCACAAATCATGTCTTTTG $\verb|CCTCTTTGTTACCCAGGTTCGATCAAGGGGACTGGATGCCCAAGTGATTTTCTCTAATAATCGGGTTGGGACTT|\\$ AACTTTAAGGTGTTTTCAATGTGATTTTAGTATTTACAGTAATAAAATAAAATTTATACAAAGTTTCAGAGAACTA CCAACTCTCTAGTTAATTTTGATGAAGATGTTTTCATTAATAGTCTGGTTTAGTATTAATTTAACCTTGAAATAA GAAATTGGTCCTGATTTGCCACCTTCATTTTTCCATCTGCTGAAATGCCATTTCAGAATGTATAAAAGTACTTTC AGAATTAGAAGAAAAGTGAGAGCTTCAGCAGAACGTGTCAAGTCGCTAATAACAGGAGTCGAACCTTATGTTTGA AAATTAACTGAGTGAGTTAAGTGCAAGCATAAACTAAAATTTATATGACTTTGAATTTAAGAACCACTAATAACT GTGTTCTAATTAACACAGTAATCTGTTCAGCCAAAGGATACTAACAGCCATTCTTTGGACTGTTGATTTGAT AACTTCAAGAAGTTATAACTTTGCTACCCTGGATTCTGATGCAATTTCAATATAAAAAGTTGTTCCTTTCATAGT

1271/2682 FIGURE 1143C

1272/2682 FIGURE 1144

MAPVQLENHQLVPPGGGGGGGGGGPPSAPAPPPPGAAVAAAAAAASPGYRLSTLIEFLLHRAYSELMVLTDLLPR ${\tt KSDVERKIEIVQFASRTRQLFVRLLALVKWANNAGKVEKCAMISSFLDQQAILFVDTADRLASLARDALVHARLP}$ SFAIPYAIDVLTTGSYPRLPTCIRDKIIPPDPITKIEKQATLHQLNQILRHRLVTTDLPPQLANLTVANGRVKFR VEGEFEATLTVMGDDPDVPWRLLKLEILVEDKETGDGRALVHSMQISFIHQLVQSRLFADEKPLQDMYNCLHSFC LSLQLEVLHSQTLMLIRERWGDLVQVERYHAGKCLSLSVWNQQVLGRKTGTASVHKVTIKIDENDVSKPLQIFHD PPLPASDSKLVERAMKIDHLSIEKLLIDSVHARAHQKLQELKAILRGFNANENSSIETALPALVVPILEPCGNSE CLHIFVDLHSGMFQLMLYGLDQATLDDMEKSVNDDMKRIIPWIQQLKFWLGQQRCKQSIKHLPTISSETLQLSNY STHPIGNLSKNKLFIKLTRLPQYYIVVEMLEVPNKPTQLSYKYYFMSVNAADREDSPAMALLLQQFKENIQDLVF RTKTGKOTRTNAKRKLSDDPCPVESKKTKRAGEMCAFNKVLAHFVAMCDTNMPFVGLRLELSNLEIPHQGVQVEG DGFSHAIRLLKIPPCKGITEETQKALDRSLLDCTFRLQGRNNRTWVAELVFANCPLNGTSTREQGPSRHVYLTYE NLLSEPVGGRKVVEMFLNDWNSIARLYECVLEFARSLPDIPAHLNIFSEVRVYNYRKLILCYGTTKGSSISIQWN SIHQKFHISLGTVGPNSGCSNCHNTILHQLQEMFNKTPNVVQLLQVLFDTQAPLNAINKLPTVPMLGLTQRTNTA YQCFSILPQSSTHIRLAFRNMYCIDIYCRSRGVVAIRDGAYSLFDNSKLVEGFYPAPGLKTFLNMFVDSNQDARR ${\tt RSVNEDDNPPSFIGGDMMDSLISQLQPPPQQQPFPKQPGTSGAYPLTSPPTSYHSTVNQSPSMMHTQSPGNLHAA}$ SSPSGALRAPSPASFVPTPPPSSHGISIGPGASFASPHGTLDPSSPYTMVSPSGRAGNWPGSPQVSGPSPAARMP GMSPANPSLHSPVP.DASHSPRAGTSSQTMPTNMPPPRKLPQRSWAASIPTILTHSALNILLLPSPTPGLVPGLAG SYLCSPLERFLGSVIMRRHLQRIIQQETLQLINSNEPGVIMFKTDALKCRVALSPKTNQTLQLKLTPENAGQWKP DELOVLEKFFETRVAGPPFKANTLIAFTKLLGAPTHILRDCVHIMKLELFPDQATQLKWNVQFCLTIPPSAPPIA PPGTPAVVLKSKMLFFLQLTQKTSVPPQEPVSIIVPIIYDMASGTTQQADIPRQQNSSVAAPMMVSNILKRFAEM NPPROGECTIFAAVRDLMANLTLPPVGRP

1273/2682 FIGURE 1145A

 ${\tt GGGGCACTGAGGAGCGGCGCGCGGGGCAGCGAGGAGCCCGATGCAGGGTTCTGCGCGTCATTTCCGGTCCCGC}$ GGGCGCCCGTGAAGCCCACCTGGATCCGCCAGCGCTGTGCCACTCCCCAGTGCCGAGCTCCGAGCTGTCTCCGC GGCCTCGCGCCCGGCCCTCCACCGCGCACCTCTTAGGCCCCGCCCAGCGTCCCTTTGTTGTGAAGGCGCCC GGGCCTAGCGCTATGCCTGCGGCGGAGACTGCATCAGGCTCTCGCGTCTGCTTCTGCGCTTTGCCTGGGAGAGGC $\verb|CCTGGTGGCCTCGTTCCTGGCGCCCGGAGTCCCTGCTGCGGCCCCACCCCCGGGCGGTCACGGTGACCCATGCTG| \\$ CCCAGCCTGGAGGTAAAATCGTTCGTGGCTGTGGCTTCAGCATGTCGTCCTCGGTGAAAACCCCAGCACTGGAAG AGCTGGTTCCTGGCTCCGAAGAGAAGCCGAAAGGCAGGTCGCCTCTCAGCTGGGGCTCTCTGTTTGGTCACCGAA GTGAGAAGATTGTTTTTGCCAAGAGCGACGGCGCACAGATGAGAACGTACTGACCGTCACCATCACGGAGACCA CGGTCATCGAGTCAGACTTGGGTGTGGGGGCTCGCGGGCGCTGCTCTACCTCACGCTGTGGTTCTTCTTCAGCT TCTGCACGCTCTTCCTCAACAAGTACATCCTGTCCCTGCTGGGAGGCGAGCCCAGCATGCTAGGTGCGGTGCAGA TGCTGTCCACCACGGTTATCGGGTGTGTGAAAACCCTCGTTCCTTGCTGTTTGTATCAGCACAAGGCCCGGCTTT CCTACCCACCCAACTTCCTTATGACGATGCTGTTTGTGGGTCTGATGAGGTTTGCAACTGTGGTTTTGGGTTTGG TCAGCCTGAAAAATGTGGCGGTTTCGTTTGCTGAGACGGTGAAGAGCTCCGCCCCATCTTCACGGTGATCATGT TGTGCACGGCCACTGAGATCAGCTTCAATGTCCTGGGGTTCTCGGCCGCACTGTCCACCAACATCATGGACTGTT TGCAAAATGTTTTTTCAAAAAAGCTGCTCAGCGGGGACAAATACAGGTTCTCGGCCCCGGAGCTGCAGTTCTACA CCAGCGCCGCTGCGGTGGCCATGCTCCTCCCGGCCCGGGTTTTCTTTACGGACGTCCCAGTGATCGGGAGGAGCG GGAAGAGCTTCAGCTACAACCAGGACGTGGTGCTGCTGCTTCTGACAGACGGAGTCCTGTTCCACCTTCAGAGCG TCACGGCGTACGCCCTCATGGGGAAAATCTCCCCGGTGACTTTCAGCGTCGCCAGCACCGTGAAACATGCCTTGT ${\tt CCATCTGGCTCAGCGTAATCGTTTTCGGCAACAAGATCACCAGCTTGTCGGCCGTTGGCACAGCCCTGGTGACCG}$ TTGGGGTCCTGCTCTACAACAAAGCCAGGCAACACCAGCAGGAGGCGCTGCAGAGCCTGGCTGCAGCCACTGGCC GCTGCTGCTGTCCTCGTGACACTGCATCCCCCAGAAATGGGCAGGGACGCCCTCCTCCATGGCCCTGCTGGGGTG CAGGACATGGGGAGCTAAGTTGGCCATTGCCTGCGGCTTTCTCGGTTTGTCGGTGAAGACCAGCAGAAACTCAAA CTGGGGATTCCAGGTATCAGCTTCCTGGAGTAGACACCAGACCAGTAGCTGACTGTCCCGCCGAGCCCATCCCC GTGTAATGTGAAAACAGCCTCTGAGGCTCCCATGCTGGGGGTGCCCACTTCCTCTGGGCGACACCCCAGGGTC CACCGGGAGCCAGAGGTGGGTCCAGTGCCAACGAGAGCCGCTCCCTGCCACAGCCAAGAGAGCCCTCGGCTTCCC ACACCAGCCATCGAAGGCCCTGAGGCCCTGGACCGGCGGCAGACTGGCCCTGGGCATGAGGCCACAGAGCAGGGC CGAAGGGAGGGCACAGAGGGCCCTGGAAGGAAGGTCTCCTGCTGCCACGGTGGGCACTCAGAACTTCTCCCCAC CTGACCCAGGGCTGTGGGCATCCTCAGACTATCCCAGAGGCATCGCAAGCCTCAAGCTGCAGCATTGCACGGCAC TCAAGGGCTATGACCACGGAGGCCGTTCAGTCGCTTCTGTTTAGAGGAAGGCCCCCTACCTCTTCCACACCCTGC CCTCCTATCCCTTCCACACCCTGGGCTGCATGAGCTCCCCGCAACCCCAGGGCACCCTGCCCTACCTGTGGG GGTTTCCAGCCCTGAGGTTGAGGACAAACCTCTCGTGTTTAACTTGGGAGGAGATGTGTACGTTCCTTTTCTTTT CGTTCCTATCATCATCTAGCACCTGTCCGGTTCCCCACGTGAGCCTTGGGCAGGACGCTGCAGTGTTGATGGTTT GGGTTACGTGGCGTTTACCTGGGCGCCGTCCTTGCTGAAAAAGGAAACGTCCACACTGAATGTTTCTGGGGCGCG TGGTGTGTCAGGCGCCCACCCTGTCCCACTCTCCCCAAGGGACAGTAGTACGGCACACTGGGGCCACCAGCCA GCTCAACTCATCCTCCTGTGTCACGCACCCCCGAGGGCCGCAGGAGGCCTGAGGAGTGGCTACTGGAGCCGTGTGT TAGGCAGAGGCTTCTGACCATGTCTGAGCTCTTTACCCCCAATCTCGCAACCGGCGGATTCCCATGCCCGGTGCA GCCTGTTGCCAGCCAGCCTTTGAGACCCAGAGCTCCAGGGCTTGTCAGAGGCAGCATGGGGCTCCAGTGGTCCCG AGTCTCATTTCCCTGCCTGCTCTTTAGGCCTTTTGGCACCCATGGTCACTTCACTGGTTTTCCATTTGGCTTCTCA CCTGGGAAATACAAAATAGCCCCTCCTGAAGATAAAATCGTTCAGAAACAGAGCAATAATTCTGACTCATTAAC TTCTACCTACTCAAAAAAGTCTGCCATGATGATGGACCGAAGTGAGGCTTTTTAACCCACAAGTAACCTTTTTAT TTTTTTGAGACGGTCTTGCTCTGTCACCCAGGCTGGAGTGCAGTGGCATGATCTTGGCTCGCTGCAGCCTCGACT TCCTGGGCTCAAGTGATCCACCTCAGCCTCCATGTGGCTGGAACCGCAGGCACGTGCCACCATGCCTGGCTATT TTTTTGTTGAGCTGGGCTCTCGCTTTGTTGCCCAGGCTGGTCTTGAACTCCTCGGCTCAAGCAATCCTTCCCACT CAGCCTCCTGTAGTGTCGAGAATATAGGCGTGGGCTACTACACCTGCTTCAGCCGCTTCTATAAAACCGCTGACC TGTGTGTGGAGGACAGGCCAGGTGTGTGCTCACTGCGCTGCGAAGATGTTTTGTCACGTGACTTTCCCTGGGTTT

1274/2682 FIGURE 1145B

CCATTTCTTTTTTTCTGCTTTCCTCAAAAACTAATAGAAGACCGGCTGCGGTAGCTCAGGCCTCTAGTCCCAGCA CTTTGGGAGGCTGCAGATGGCGGATCACAAGGCCAGGAGTTCGAGACCAGCCTGGCCAACATGATGAAACCCTGT AGGAGAATTGTTTGAGCCCCAGAGGCGGAGGTTGCAGTGAGCCAAGATCGTGCCATTGCACTCCAGCCTGGGCAA CAGGGCAAGATTCCGTCTCAAAAACAAACACTATTAGAAAATGCTCTGGAGGTGGCGGGGAGTTGTTGATTTGTG AGGACAGATTGAAAGCAACTCCCAGGGTGGCCTTGTCCACCTCCCCATCGAGAATATGGCTGCCGGCCTCTTTGA AGATTGTGGTCTGGCATAAGGAGGTGCAGGCGCCTGGTTCTGAGCACCTTGGAATTTCCAGCCGCACAGCATC TTTTTCCAAAGGATTAGCAAATAGGTTGATTTCCTGTGTAACGCTGCTCTGGGGGCCTCTTCCTCATCCTGGCAGA TCTTCTCCATGCCCAAGTCAGTTTCCAGCCGCTGGTCTTCATGGCATTCCCAGCACAGCTGGACACCAAGAGGCA AAACCCAAGGCCTGGCTTGGCCGTGTTAACGATTGTACAGACATTTTTTTAAATAACTTTGTGTAATACTTTTCT AGAATAGTAAGTTCTTGTTGAACTGTCACAGATGAGCTTCTAGGAACACCCGGGTGTGGTTACTTCCACTGGGT GTGTCCATGGTCGTGGTCTGTGCCTTTGTAAACAAACAGAACACTTGAACCACCTTCCGAATTGGGTCATCGGCT TCTTTACATTGATACTTAGAGATTTGCAGCTCTCTAACTTTCAAGGAAACTTCCCCTACTGAAAAGGCATAAAAAG GAACACTGTTGCACAACCCAAAATGTGTTTTTAATTTGTGAAAAATTACCATGGTGAGTCAGACAGTCATTTTAA ACAGCTGAACAGAGACTATCATCAGCAAATAGAGCTCAGCTTTGTAGCTGCCTTTAAAATCCTTGTCCCAAATCC GGTGAGCTCTGCTTGCTGCCGCCGCCCCCTGGGTGATCACTCAGACGGGTCAGTGGGAATAACGGGCCAACAAG ACAGCTTTTTACATGTGTCCAAAGGATGGCCTTTCGAAGGCCTGGAAGTATTTCACTGTTGGAAGAAGTAAACAA GAATGACATTCCAGATGGAAATAGAATTCTCTCTCTTGCCTTTGACCAACATGGTACTAAGGGGTTTCTTCTTTC CCAATGTATGTACGTGCCCTGCTGGGGGCCTTACTTTATAGAATGAGAGCATCCGAGCTTCCCTAATGAATCTGG CTAGTTCTGTGTCTGGCTGAGGATACAGGAGTGGGACATCCACTCTCGGATCCCTCAGAGCACAGAAACCTTCAG CTTTGCTGTCTCTGAAGTATTTCCTCCAGTTTCCCTGCGGGCCCCTATGTTTGAGTTTGATGGCTGCTGGATCCT CACTCAACGAAAACTCGGTTGGAAACTGTTCCGCCTGGCAGTCCTTTTTTTGTTGTTTTCCATCTCATTTCCCTTC CATCTGAAAGTGGCATTCAGCTGACTTGCTCATTTAGACTGTTCACGGAGTCTGAATCTGCCAACGTGGTGTTGG AGGCTCCACCTTGAAAAGGGCCACAGTCAGGGCAACTTTCCCCATACAGGAAAACTTGAAAATTACATCAACAGT TTTATAGTGTTTTGCATGTGACCTATTTCAGTATTTATATAACTAGATTAGTGCTTTCTAGCAAACGGTTCTGTT AATTAGCGAGTCACTGTTGATTCTGCTGTGGTGGTAAGTTGATACCGTGTAACTAATCCCGTGGATGCCTCCTCG AATATGG

1275/2682 FIGURE 1146

RYACGGDCIRLSRLLLRFAWERPWWPRSWRPESLLRPHPRAVTVTHAAQPGGKIVRGCGFSMSSSVKTPALEELV PGSEEKPKGRSPLSWGSLFGHRSEKIVFAKSDGGTDENVLTVTITETTVIESDLGVWSSRALLYLTLWFFFSFCT LFLNKYILSLLGGEPSMLGAVQMLSTTVIGCVKTLVPCCLYQHKARLSYPPNFLMTMLFVGLMRFATVVLGLVSL KNVAVSFAETVKSSAPIFTVIMSRMILGEYTGLLVNLSLIPVMGGLALCTATEISFNVLGFSAALSTNIMDCLQN VFSKKLLSGDKYRFSAPELQFYTSAAAVAMLVPARVFFTDVPVIGRSGKSFSYNQDVVLLLLTDGVLFHLQSVTA YALMGKISPVTFSVASTVKHALSIWLSVIVFGNKITSLSAVGTALVTVGVLLYNKARQHQQEALQSLAAATGRAP DDTVEPLLPQDPRQHP

1276/2682 FIGURE 1147

CCCACGCGTCCGCTTTAGTGCGCTCGCCGTCGGCTCTACCTGCGTGCTTTAGCTCCTTCTCGCCTGATCCTTCTG TCTCTCCCAACCCCGGACACCCGGCTTCGACTGGTTATATCTTCGGTGTTCTTTTCCTCTTCTTCTTTCGCGG TTCAGCATGCAGGAAAAAGACGCCTCCTCACAAGGTTTCCTGCCACACTTCCAACATTTCGCCACGCAGGCGATC CATGTGGGCCAGGATCCAGAGCAATGGACCTCCAGGGCTGTAGTGCCCCCCATCTCACTGTCCACCACGTTCAAG CAAGGGGCGCCTGGCCAGCACTCGGGTTTTGAATATAGCCGTTCTGGAAATCCCACTAGGAATTGCCTTGAAAAA GCAGTGGCAGCACTGGATGGGGCTAAGTACTGTTTGGCCTTTGCTTCAGGTTTAGCAGCCACTGTAACTATTACC CATCTTTTAAAAGCAGGAGACCAAATTATTTGTATGGATGATGTGTATGGAGGTACAAACAGGTACTTCAGGCAA GTGGCATCTGAATTTGGATTAAAGATTTCTTTTGTTGATTGTTCCAAAATCAAATTACTAGAGGCAGCAATTACA CCAGAAACCAAGCTTGTTTGGATCGAAACCCCCACAAACCCCACCAGAAGGTGATTGACATTGAAGGCTGTGCA CATATTGTCCATAAGCATGGAGACATTATTTTGGTCGTGGATAACACTTTTATGTCACCATATTTCCAGCGCCCT TTGGCTCTGGGAGCTGATATTTCTATGTATTCTGCAACAAAATACATGAATGGCCACAGTGATGTTGTAATGGGC CTGGTGTCTGTTAATTGTGAAAGCCTTCATAATAGACTTCGTTTCTTGCAAAACTCTCTTGGAGCAGTTCCATCT CCTATTGATTGTTACCTCTGCAATCGAGGTCTGAAGACTCTACATGTCCGAATGGAAAAGCATTTCAAAAACGGA CAGCATGAGTTGGTGAAGCGTCAGTGTACAGGTTGTACAGGGATGGTCACCTTTTATATTAAGGGCACTCTTCAG CATGCTGAGATTTTCCTCAAGAACCTAAAGCTATTTACTCTGGCCGAGAGCTTGGGAGGATTCGAAAGCCTTGCT GAGCTTCCGGCAATCATGACTCATGCATCAGTTCTTAAGAATGACAGAGATGTCCTTGGAATTAGTGACACACTG ATTCGACTTTCTGTGGGCTTAGAGGATGAGGAAGACCTACTGGAAGATCTAGATCAAGCTTTGAAGGCAGCACAC ${\tt CCTCCAAGTGGAAGTCACAGC}$ TATTCCAGAGCTGCTATTAGAAGCTGCTTCCTGTGAAGATCAAATCTTCCT GAGTAATTAAATGGACCAACAATGAGCCTTTGCAAAATTTTCAAGCGGAAATTTTAAGGCACCTCATTATCTTTC ATAACTGTAATTTTCTTAGGGATCATCTCTGTTAAAAAGTTTTCTGTATGTCATGTTATAATTACAGGTCAATTC TGTTAATATCTTTTTGTTAATTTTGCTCTATGTTTGCCTCTGAAGGAGGTGAGATTTGTGCTACTTTGGGAGATT ATGTTCTTTTTCATGTCTAAGATTTATTTTGATCATGTTTATAATATAATGGTAATTCATTTTTGATGTTTTGT GCAATGGTTTACACTTAAAAAAAAAAAAAAAAA

1277/2682 FIGURE 1148

MQEKDASSQGFLPHFQHFATQAIHVGQDPEQWTSRAVVPPISLSTTFKQGAPGQHSGFEYSRSGNPTRNCLEKAV AALDGAKYCLAFASGLAATVTITHLLKAGDQIICMDDVYGGTNRYFRQVASEFGLKISFVDCSKIKLLEAAITPE TKLVWIETPTNPTQKVIDIEGCAHIVHKHGDIILVVDNTFMSPYFQRPLALGADISMYSATKYMNGHSDVVMGLV SVNCESLHNRLRFLQNSLGAVPSPIDCYLCNRGLKTLHVRMEKHFKNGMAVAQFLESNPWVEKVIYPGLPSHPQH ELVKRQCTGCTGMVTFYIKGTLQHAEIFLKNLKLFTLAESLGGFESLAELPAIMTHASVLKNDRDVLGISDTLIR LSVGLEDEEDLLEDLDQALKAAHPPSGSHS

1278/2682 FIGURE 1149

CGGCTGCTGCTGCTGTGTGCTGGGGGCCCGGTCGCCAGGCAAAAAGCCCTCCACGTTTGAGGGGAGTCATG

AGCCGTTTCCTGAATGTGTTAAGAAGTTGGCTGGTTATGGTGTCCATCATAGCCATGGGGAACACGCTGCAGAGC TTCCGAGACCACACTTTCTCTATGAAAAGCTCTACACTGGCAAGCCAAACCTTGTGAATGGCCTCCAAGCTCGG ACCTTTGGGATCTGGACGCTGCTCTCATCAGTGATTCGCTGCCTCTGTGCCATTGACATTCACAACAAGACGCTC TATCACATCACACTCTGGACCTTCCTCCTTGCCCTGGGGCATTTCCTCTCTGAGTTGTTTTGTCTATGGAACTGCA GCTCCCACGATTGGCGTCCTGGCACCCCTGATGGTGGCAAGTTTCTCCATCCTGGGTATGCTGGTCGGGCTCCGG ${\tt TATCTAGAAGTAGAACCAGTATCCAGACAGAAGAAGAAGAAGAGAACC} \underline{{\tt TGA}}{\tt GGCCAGCATTATCACCTCCAGGACTTTCTC}$ TTATTCACTTTTAGCCTCTTTTTTTAATTTTTAAAATTTAAAGATATGCATACTGAAAAGTATATAACATGTACG GCCCACTGTGTCTCCCTACCTGCAACCTCTTCCAGGCTCCCTTTTCCAGCCTTCCCCTTTTTCCCTTTTA AGCTGTGACCAAGGGCTGCCTCAAGGGGTTGTCCACGCAGGTTGGGCTCCTCTCTGCTGCTGGACCCAAGACTCT TCTACAGATGCATGAGGGTTGGAAGAGTCTGGGCTGTTTTTAGACCTTCTGGTCAGCTGTATTTGTGTAACAACT TTTGTAATAAATAGAAAAACCCTCTGCTCTGATCAGTTCTTGTACTTTGACCTCTGCTAAGACAAGAGCATGGCT GCCTCCTCTGAGCCCTAGGAGAATCACAGCTTTATGCCTGATTGAATACACCATAGTGAGTAGGACAGCTCATGA CACAGGTCAGCCTGGCTGCCTCCGGCTCCTTACTGTCATTTGCTCATTCCTCTTGTATTCTTGAAGTCAAATCTT CTTTTTTCTCACCTTCAAGAGTCTGCGTTCACAACTAAACACTAAGTGCCCTTTCTTATTTCCTCCTAAAGAAGA AACAGATTCTTGAGAGAGCAGAGACAAAAAAATAGAACTAGGCAGCATAGATGAAACAACTGCATGACATGGGAA GAAGACAACTAAACCCCGAGGAGAATGCACTGGAATGGACAGTTGCTCTTAAACCCCTACCCAGAGGGCCTCCCCC AGCTGGACCCTCATACACAGTGTGTGTATCCAAAAGGCCATTGCTATTTCAGCAAATATTTGTTGAGTACTTCTC CATGCCGGACACTTGGGAAAGAGAAATGAACGACACAGGCAATGCCCCTGCCCTGTGGGCCTTATATTATAGTCA ATTTTGGTCAAGAAGGAATGTGGGGTGGGCAGTGGGGAACGTAACTTAAATTAGATCATCAGAAAGTCCTCCCTG AGGAGATGGATTTTTTTTTTTTTTTTTTTAGAGACGGGGTTTCACTCTGTCACCCAGGCTGGGAATTGCAGTGGCAC AATCCCTCACTGCCTCAACTTCCTGGGCTCAAGTGACCCTCCTGCATCAGCTTCCCAAGTAGCTGGGACTGC **AAGTGTGTACCACCACATCCAGCTAACATTTTTGGGGGTGGGAAGAGATGGGGTCTTACTATGTTGTCCAGGCTA** AGAGGTGGGATTTGAGCTGAGACTTGAATGCCCAGGAGTTAAATGTCTTAAGATATGGAGCAGGCCGTTAGAAAG GAGGGAGCAGCAACTGGAAGGTAGAATAGTCTTATTCAAGGAATAAGAACTATGTAATCACAGCATGGTGAAGAG TTAGGAAGTGAAAAAAAAAAAAAAA

1279/2682 FIGURE 1150

 ${\tt MSRFLNVLRSWLVMVSIIAMGNTLQSFRDHTFLYEKLYTGKPNLVNGLQARTFGIWTLLSSVIRCLCAIDIHNKTLYHITLWTFLLALGHFLSELFVYGTAAPTIGVLAPLMVASFSILGMLVGLRYLEVEPVSRQKKRN$

1280/2682 FIGURE 1151

GCACAGGTGCGGCTCCGGCTTACGGCGGCGACGCGGCGGAGGCGGGAGGCCAGAGGCGCTCACCCTCCTAGG AGTCCGACGGCGGCGACAGGGGCGGTGGGGAATTCACAAAGCTCGTCGAGCTTACCCGGGCACCGAGGCCCGAGT AGGGGATTTGGATGCGCGGGTCCCGGGTGGGGTCGGGGCCAGAGGGGGTCGCTAGTGCGGGTGTTCCACGGC<u>TGA</u>

 ${\tt TCACGCTTCGTTGGCCCCAGGCGGTGGGCTGCCGGCAGGGCAGGGCGCTGTAGTTGACGGGAGCTGCGGGGACCCC}$ CGGAGACCCGGACGCCCGTCACCCCCCCCCCCAGTCCAGCAGCGCTCCGCGGGGATGCCCGTGGTCTCGAC $\tt CCGGTCCGTCAGCCCCCGGCGCGCGCAGGGATCCGCGCCCCGGCGCCCTAAACTGCCCTGGTGTCCTCTTCGTTCTGG$ CCCAGGCTCGCCGGTGGGGGGGGGGGCTCCTCCCTTTACTTCCCTCCACCCCCTTGCACACCCCACCCCAGGC GTTTTAGGGGCTCCCCCATTCTAGGTCATGCCTCTTGCTCTTCCTTGGCCTGTGTTGAGTAAGGTGTGTTCCT GTGGTGGACGAAAGTCTGTACGATGGTTGGTGGCATTGGTCCTTAATCCTTTGGGTCTGTTTTAAGGTAAAGTGC AGTCTTTTCTTTTTCCCTCTTCCTCCATTTGCATTCTTTGTGAGGTTTGTCTGCCTTGTGCTTTTTGTCCCGGAT TAGTCTTGTTGAAGGATGGAGATTCCCAGGCGTGGAGTCTATAGCTTTTGGCTTCCATTAAGTAAAATCGCTAAC CTTTTTTTAAGAGAAAGTTAATTTTTGCCTGCAGTCATTCCAGAAAAATAGTGTACACGGACTAGCTGAATTAAT CCACTTAAAATTGTAACTTAGTTACATATGGTAGATATGTTAACTCCTATCTGATTTTTTTGGATGAAACTGTTG TACTACTAATTGAGATGATCTGCTTAAGAGTCTTCATATTCTGAACTCGAAAGGCCTTTTATGTTATATTATTGC AATCACTCAAGCTTCACCTTGGTAAACTGAACTCAGTTTAAGATTAAGAAACTGATTTC

1281/2682 FIGURE 1152

 ${\tt AQVRLRLTAATRRRREARGAHPPRSPTAATGAVGNSQSSSSLPGHRGPSRGFGCAGPGWGRGQRGSLVRVFHG}$

1282/2682 FIGURE 1153

GCGAGATCCCTACCGCAGTAGCCGCCTCTGCCGCCGCGGAGCTTCCCGAACCTCTCAGCCGCCCGGAGCCGCTCC AGGGCGCCCCAGGCCGCCCATGGTGAAGGTGACGTTCAACTCCGCTCTGGCCCAGAAGGAGGCCAAGAAGGACGAGCCCAAGAGCGGCGAGGAGGCGCTCATCATCCCCCCCGACGCCGTCGCGGTGGACTGCAAGGACCCAGATGATG TGGTACCAGTTGGCCAAAGAAGAGCCTGGTGTTGGTGCATGTGCTTTGGACTAGCATTTATGCTTGCAGGTGTTA TTCTAGGAGGAGCATACTTGTACAAATATTTTGCACTTCAACCAGATGACGTGTACTACTGTGGAATAAAGTACA TCAAAGATGATGTCATCTTAAATGAGCCCTCTGCAGATGCCCCAGCTGCTCTCTACCAGACAATTGAAGAAAATA TTAAAATCTTTGAAGAAGAAGAAGTTGAATTTATCAGTGTGCCTGTCCCAGAGTTTGCAGATAGTGATCCTGCCA ACATTGTTCATGACTTTAACAAGAAACTTACAGCCTATTTAGATCTTAACCTGGATAAGTGCTATGTGATCCCTC TGAACACTTCCATTGTTATGCCACCCAGAAACCTACTGGAGTTACTTATTAACATCAAGGCTGGAACCTATTTGC CTCAGTCCTATCTGATCATGAGCACATGGTTATTACTGATCGCATTGAAAACATTGATCACCTGGGTTTCTTTA TTTATCGACTGTGTCATGACAAGGAAACTTACAAACTGCAACGCAGAGAAACTATTAAAGGTATTCAGAAACGTG AAGCCAGCAATTGTTTCGCAATTCGGCATTTTGAAAACAAATTTGCCGTGGAAACTTTAATTTGTTCT<u>TGA</u>ACAG TCAAGAAAACATTATTGAGGAAAATTAATATCACAGCATAACCCCACCCTTTACATTTTGTGCAGTGATTATTT TTTAAAGTCTTCTTTCATGTAAGTAGCAAACAGGGCTTTACTATCTTTTCATCTCATTAATTCAATTAAAACCAT TACCTTAAAATTTTTTTCTTTCGAAGTGTGTGTCTTTTATATTTGAATTAGTAACTGTATGAAGTCATAGATAA TAGTACATGTCACCTTAGGTAGGAAGAATTACAATTTCTTTAAATCATTTATCTGGATTTTTATGTTTTATT TTTGTAGTTGTTAGTTGCCCTGCTACCTAGTTTGTTAGTGCATTTGAGCACACATTTTAATTTTCCTCTAATTAA AATGTGCAGTATTTTCAGTGTCAAATATATTTAACTATTTAGAGAATGATTTCCACCTTTATGTTTTAATATCCT AGGCATCTGCTGTAATAATATTTTAGAAAATGTTTGGAATTTAAGAAATAACTTGTGTTACTAATTTGTATAACC CATATCTGTGCAATGGAATATAAATATCACAAAGTTGTTTAACTAGACTGCGTGTTGTTTTCCCGTATAATAAA ACCAAAGAATAGTTTGGTTCTTCAAATCTTAAGAGAATCCACATAAAAGAAGAAACTATTTTTTAAAAATTCACT TCTTTGTGGATACTATTAAAGTAACATTTAAGCCTCAACCTTG

1283/2682 FIGURE 1154

MVKVTFNSALAQKEAKKDEPKSGEEALIIPPDAVAVDCKDPDDVVPVGQRRAWCWCMCFGLAFMLAGVILGGAYL YKYFALQPDDVYYCGIKYIKDDVILNEPSADAPAALYQTIEENIKIFEEEEVEFISVPVPEFADSDPANIVHDFN KKLTAYLDLNLDKCYVIPLNTSIVMPPRNLLELLINIKAGTYLPQSYLIHEHMVITDRIENIDHLGFFIYRLCHD KETYKLQRRETIKGIQKREASNCFAIRHFENKFAVETLICS

1284/2682 FIGURE 1155A

GCGCCCGCCTTTCTCGGCCCCCGGAGGTGACGGGGTGAAGGCGGGGAACCGAGGTGGGGAGTCCGCCAGAGC GATGAATCCTGCGGCAGAAGCCGAGTTCAACATCCTCCTGGCCACCGACTCCTACAAGGTTACTCACTATAAACA ATATCCACCCAACACAAGCAAAGTTTATTCCTACTTTGAATGCCGTGAAAAGAAGACAGAAAAACTCCAAATTAAG AACCAAAGAGAAAATCCAGGAAGCCAAAGATGTCTACAAAGAACATTTCCAAGATGATGTCTTTAATGAAAAGGG ATGGAACTACATTCTTGAGAAGTATGATGGGCATCTTCCAATAGAAATAAAAGCTGTTCCTGAGGGCTTTGTCAT TCCCAGAGGAAATGTTCTCTTCACGGTGGAAAACACAGATCCAGAGTGTTACTGGCTTACAAATTGGATTGAGAC TATTCTTGTTCAGTCCTGGTATCCAATCACAGTGGCCACAAATTCTAGAGAGCAGAAGAAAATATTGGCCAAATA TTTGTTAGAAACTTCTGGTAACTTAGATGGTCTGGAATACAAGTTACATGATTTTGGCTACAGAGGAGTCTCTTC CCAAGAGACTGCTGGCATAGGAGCATCTGCTCACTTGGTTAACTTCAAAGGAACAGATACAGTAGCAGGACTTGC TCTAATTAAAAATATTATGGAACGAAAGATCCTGTTCCAGGCTATTCTGTTCCAGCAGCAGAACACAGTACCAT **AACAGCTTGGGGGAAAGACCATGAAAAAGATGCTTTTTGAACATATTTGTAACACAGTTTTCATCAGTGCCTGTATC** TGTGGTCAGCGATAGCTATGACATTTATAATGCGTGTGAGAAAATATGGGGTGAAGATCTAAGACATTTAATAGT ATCGAGAAGTACACAGGCACCACTAATAATCAGACCTGATTCTGGAAACCCTCTTGACACTGTGTTAAAGGTTTT GGAGATTTTAGGTAAGAAGTTTCCTGTTACTGAGAACTCAAAGGGTTACAAGTTGCTGCCACCTTATCTTAGAGT TATTCAAGGGGATGGAGTAGATATTAATACCTTACAAGAGATTGTAGAAGGCATGAAACAAAAAATGTGGAGTAT TGAAAATATTGCCTTCGGTTCTGGTGGAGGTTTGCTACAGAAGTTGACAAGAGATCTCTTGAATTGTTCCTTCAA GTGTAGCTATGTTGTAACTAATGGCCTTGGGATTAACGTCTTCAAGGACCCAGTTGCTGATCCCAACAAAAGGTC CAAAAAGGGCCGATTATCTTTACATAGGACGCCAGCAGGAATTTTGTTACACTGGAGGAAGAAAAGGAGACCT TGAGGAATATGGTCAGGATCTTCTCCATACTGTCTTCAAGAATGGCAAGGTGACAAAAAGCTATTCATTTGATGA TGTGTATGTAATACATAATGTTTATTGTACAGATGTGTGGGGTTTGTGTTTTATGATACATTACAGCCAAATTAT CATTTAACCATGTAAAAGATGAGTGCTAAAGTAAGCTTTTTTAGGGCCCTTTGCCAATAGGTAGTCATTCAATCTG GAAGTTTCAGTGATTTAACAGTCTTTCCAACTTTTCATGATTTTTATGAGCACAGACTTTCAAGAAAATACTTGA AAATAAATTACATTGCCTTTTGTCCATTAATCAGCAAATAAAACATGGCCTTAACAAAGTTGTTTTGTGTTATTGT <u>ACAATTTGAAAATTATGTCGGGACATACCCTATAGAATTACTAACCTTACTGCCCCTTGTAGAATATGTATTAAT</u> CATTCTACATTAAAGAAAATAATGGTTCTTACTGGAATGTCTAGGCACTGTACAGTTATTATATATCTTGGTTGT TGTATTGTACCAGTGAAATGCCAAATTTGAAAGGCCTGTACTGCAATTTTATATGTCAGAGATTGCCTGTGGCTC TAATATGCACCTCAAGATTTTAAGGAGATAATGTTTTTAGAGAGAATTTCTGCTTCCACTATAGAATATACAT TTTATTAAGTTTTTAAAAAATTAAATTGGATATTAAATTGTATGGACATCATTTATTAATTTTAAACTGAATGCC CTCAATAAGTAATACTGAAGCACATTCTTAAATGAAGATAAATTATCTCCAATGAAAAGCATGACATGTGTTTCA ATAGAAGAATCTTAAGTTGGCTAAATTCAAAGTGCTTGACATCAAAATGTTCTAGAGTGATTAGCTACTAGATTC GAGGCAGCGGTTGGCCAACTATAGCCCAAAGGCCAAATTTGGACTTCTTTTTATAAATGCAGATTGTCTATGGCT GCTTTCCCACTCCAGCCTAAGGTAAACAGCTGCAATAGAAGCCAAATGAGAATCGCAAAGCCCAAAATGTTT ATTAACCTGCCCTTTACACAAAATCACACAAAAAGTTTCCTGATCTCTGTTCTAAGAAAAGGAGTGTGCCTTGCA $\tt TTTAAAAGGAAATGTTGGTTTCTAGGGAAGGGAGGGAGGCTAAATAATTGATACGGAATTTTCCTCTTTTGTCTTC$ TTTTTTCTCACTTAAGAATCCGATACTGGAAGACTGATTTAGAAAAGTTTTTAACATGACATTAAATGTGAAATT TTAAAAATTGAAAAGCCATAAATCATCTGTTTTAAATAGTTACATGAGAAAATGATCACTAGAATAACCTAATTA

1285/2682 FIGURE 1155B

1286/2682 FIGURE 1156

MNPAAEAEFNILLATDSYKVTHYKQYPPNTSKVYSYFECREKKTENSKLRKVKYEETVFYGLQYILNKYLKGKVV
TKEKIQEAKDVYKEHFQDDVFNEKGWNYILEKYDGHLPIEIKAVPEGFVIPRGNVLFTVENTDPECYWLTNWIET
ILVQSWYPITVATNSREQKKILAKYLLETSGNLDGLEYKLHDFGYRGVSSQETAGIGASAHLVNFKGTDTVAGLA
LIKKYYGTKDPVPGYSVPAAEHSTITAWGKDHEKDAFEHIVTQFSSVPVSVVSDSYDIYNACEKIWGEDLRHLIV
SRSTQAPLIIRPDSGNPLDTVLKVLEILGKKFPVTENSKGYKLLPPYLRVIQGDGVDINTLQEIVEGMKQKMWSI
ENIAFGSGGGLLQKLTRDLLNCSFKCSYVVTNGLGINVFKDPVADPNKRSKKGRLSLHRTPAGNFVTLEEGKGDL
EEYGQDLLHTVFKNGKVTKSYSFDEIRKNAQLNIELEAAHH

FIGURE 1157

CGCGCGCCCCTGTCCTCCGGCCCGAGATCAATCCTGCGGCAGAAGCCGAGTTCAACATCCTCCTGGCCACCGAC TCCTACAAGGTTACTCACTATAAACAATATCCACCCAACACAAGCAAAGTTTATTCCTACTTTGAATGCCGTGAA **AAGAAGACAGAAAACTCCAAATTAAGGAAGGTGAAATATGAGGAAACAGTATTTTATGGGTTGCAGTACATTCTT** AATAAGTACTTAAAAGGTAAAGTAGTAACCAAAGAGAAAATCCAGGAAGCCAAAGATGTCTACAAAGAACATTTC CAAGATGATGTCTTTAATGAAAAGGGATGGAACTACATTCTTGAGAAGTATGATGGGCATCTTCCAATAGAAATA AAAGCTGTTCCTGAGGGCTTTGTCATTCCCAGAGGAAATGTTCTCTTCACGGTGGAAAACACAGATCCAGAGTGT TACTGGCTTACAAATTGGATTGAGACTATTCTTGTTCAGTCCTGGTATCCAATCACAGTGGCCACAAATTCTAGA GAGCAGAAGAAAATATTGGCCAAATATTTGTTAGAAACTTCTGGTAACTTAGATGGTCTGGAATACAAGTTACAT GATTTTGGCTACAGAGGAGTCTCTTCCCAAGAGACTGCTGGCATAGGAGCATCTGCTCACTTGGTTAACTTCAAA GGAACAGATACAGTAGCAGGACTTGCTCTAATTAAAAAATATTATGGAACGAAAGATCCTGTTCCAGGCTATTCT GTTCCAGCAGCAGAACACAGTACCATAACAGCTTGGGGGAAAGACCATGAAAAAGATGCTTTTGAACATATTGTA ACACAGTTTTCATCAGTGCCTGTATCTGTGGTCAGCGATAGCTATGACATTTATAATGCGTGTGAGAAAATATGG GGTGAAGATCTAAGACATTTAATAGTATCGAGAAGTACACGGCACCACTAATAATCAGACCTGATTCTGGAAAC CCTCTTGACACTGTGTTAAAGGTTTTGGAGATTTTAGGTAAGAAGTTTCCTGTTACTGAGAACTCAAAGGGTTAC AAGTTGCTGCCACCTTATCTTAGAGTTATTCAAGGGGATGGAGTAGATATTAATACCTTACAAGAGATTGTAGAA GGCATGAAACAAAAATGTGGAGTATTGAAAATATTGCCTTCGGTTCTGGTGGAGGTTTGCTACAGAAGTTGACA AGAGATCTCTTGAATTGTTCCTTCAAGTGTAGCTATGTTGTAACTAATGGCCTTGGGATTAACGTCTTCAAGGAC CCAGTTGCTGATCCCAACAAAAGGTCCAAAAAGGGCCGATTATCTTTACATAGGACGCCAGCAGGAATTTTGTT ACACTGGAGGAAGGAAAAGGAGACCTTGAGGAATATGGTCAGGATCTTCTCCATACTGTCTTCAAGAATGGCAAG GTGACAAAAAGCTATTCATTTGATGAAATAAGAAAAAATGCACAGCTGAATATTGAACTGGAAGCAGCACATCAT TAGCCTTTATGACTGGGTGTGTTGTGTGTATGTAATACATAATGTTTATTGTACAGATGTGTGGGGGTTTGTGT TTTAGGTGATCTCAAATTAGGAAATGCATTTAACCATGTAAAAGATGAGTGCTAAAGTAAGCTTTTTAGGGCCCT TGATGATCACATAAAACAGATTTGCATAAAATTACCATGATTGCTTTATGTTTATATTTAACTTGTATTTTTGTA CAAACAAGATTGTGTAAGATATATTTGAAGTTTCAGTGATTTAACAGTCTTTCCAACTTTTCATGATTTTTATGA GCACAGACTTTCAAGAAAATACTTGAAAAATAAATTACATTGCCTTTTGTCCATTAATCAGCAAATAAAACATGGC CTTAACAAAGTTGTTTGTTATTGTACAATTTGAAAATTATGTCGGGACATACCCTATAGAATTACTAACCTTA CTGCCCCTTGTAGAATATGTATTAATCATTCTACATTAAAGAAAATAATGGTTCTTACTGGAATGTCTAGGCACT GTACAGTTATTATATATCTTGGTTGTTGTATTGTACCAGTGAAATGCCAAATTTGAAAGGCCTGTACTGCAATTT TATATGTCAGAGATTGCCTGTGGCTCTAATATGCACCTCAAGATTTTAAGGAGATAATGTTTTTAGAGAGAATTT CTGCTTCCACTATAGAATATATACATAAATGTAAAATACTTACAAAAGTGG

1288/2682 FIGURE 1158

MNPAAEAEFNILLATDSYKVTHYKQYPPNTSKVYSYFECREKKTENSKLRKVKYEETVFYGLQYILNKYLKGKVV
TKEKIQEAKDVYKEHFQDDVFNEKGWNYILEKYDGHLPIEIKAVPEGFVIPRGNVLFTVENTDPECYWLTNWIET
ILVQSWYPITVATNSREQKKILAKYLLETSGNLDGLEYKLHDFGYRGVSSQETAGIGASAHLVNFKGTDTVAGLA
LIKKYYGTKDPVPGYSVPAAEHSTITAWGKDHEKDAFEHIVTQFSSVPVSVVSDSYDIYNACEKIWGEDLRHLIV
SRSTQAPLIIRPDSGNPLDTVLKVLEILGKKFPVTENSKGYKLLPPYLRVIQGDGVDINTLQEIVEGMKQKMWSI
ENIAFGSGGGLLQKLTRDLLNCSFKCSYVVTNGLGINVFKDPVADPNKRSKKGRLSLHRTPAGNFVTLEEGKGDL
EEYGQDLLHTVFKNGKVTKSYSFDEIRKNAQLNIELEAAHH

1289/2682 FIGURE 1159

1290/2682 FIGURE 1160

MTTTTTFKGVDPNSRNSSRVLRPPGGGSNFSLGFDEPTEQPVRKNKMASNIFGTPEENQASWAKSAGAKSSGGRE DLESSGLQRRNSSEASSGDFLDLKGEGDIHENVDTDLPGSLGQSEEKPVPAAPVPSPVAPAPVPSRRNPPGGKSS LVLG

1291/2682 FIGURE 1161

GGGGGGAAACGGAAGTGAGCGGCGGGTCGACTGACGGTAACGGGGCAGAGAGGCTGTTCGCAGAGCTGCGGAAG ATCANTGCCAGAGGACTTGGATCTGAGCTAAAGGACAGTATTCCAGTTACTGAACTTTCAGCAAGTGGACCTTTT GAAAGTCATGATCTTCTTCGGAAAGGTTTTTCTTGTGTGAAAAATGAACTTTTGCCTAGTCATCCCCTTGAATTA TCAGAAAAAATTTCCAGCTCAACCAAGATAAAATGAATTTTTCCACACTGAGAAACATTCAGGGTCTATTTGCT TCACTGGATGTTTTGAGGGGTAATGATGAGACTATTGGATTTGAGGATATTCTTAATGATCCATCACAAAGCGAA $\tt GTCATGGGAGAGCCACACTTGATGGTGGAATATAAACTTGGTTTACTG{\color{red}{\textbf{TAA}}} {\tt TAGTGTGCTGTTCATGGAAACCGA}$ GGGCTGCATCTTGTTTATAGTCATCTTTGTACTGTAATTTGATGTACACAACATTAAAAGTACTGACACCTGAGA ATTTCTGCTCAAGTAGTATCAGTGATCATTTAAAATTTGGAGGGGTCTTTGGTTTACAGCCATGTGACAATTAAA TTAAGCATTATAAGCATTTGAGTCTATAAACTTTATAGTAGCATCTTTCAGAATAAACATTTTTAATTGATTTCA GTGGCAACTCTCAAATTGATTACAATATGAGATATATCAGTGTCGTCCATTAACACTCATAAGAATAATATTTAC TGTGTCAGTGCTATTTTAGGATTATAGTTATTGTTTGATTATTTCAGGTTGAAAAGTAGAAGTTCCAAGGTTTTG ATTTTGGTCTGGTCTTTAAGTGAAAAATTAAAGCAACCAGTAGATGTAGGTTAAACTTTTACTTCATAGACTTAA TATGTGATTAATATTGCCAAGCAACACTGTTAAAGAAAAGTAAAACTCATTTTTTCTTGTTCTTAATTTATAT ATTACAAGATACTGTAAGGTATTCTTTATGAAGTTGATATATAAAAATTTACATTTTTAGAACATTAGTGAATGG

1292/2682 FIGURE 1162

 ${\tt MNARGLGSELKDSIPVTELSASGPFESHDLLRKGFSCVKNELLPSHPLELSEKNFQLNQDKMNFSTLRNIQGLFAPLKLQMEFKAVQQVQRLPFLSSSNLSLDVLRGNDETIGFEDILNDPSQSEVMGEPHLMVEYKLGLL}$

1293/2682 FIGURE 1163

CCAGGGCCTGACTAAACCTGGAGACTCGGGTGGCCGAGGGGCTTCATACCAGCTGAAGAGCGACAAGCCGCTGGC AGCCGCGGATCTCACCGCCGCTCAGGGTTTTTAGAACTTCAGCCATAAAAATCGGTGGTACCCGTCTGTTTTCTTGTGCAAACTGTGATACGATCCTGACCAACCGCTCAGAACTCATCTCCACTC GTTTCACAGGCGCCACTGGCAGAGCATTTCTTTTTAACAAGGTAGTTAACCTGCAGTACAGCGAAGTTCAAGATC ${ t GTGAGGGCTTTGAGGAGCATGTACCATCTGATAACTCT}{ t { t GA}} { t GATACAGAGAGAAATCCATCTTTTCCCAGGTCT}$ CCTTCACTGAAAACAAAAATCTACTTACATACACTGTCACCTTAGCATCAGAGTCGGATTAATGAACTGCGGAAC ACAGCAGTGTGTAGAGAGAATATTATGCAGATGCCGTTAATTTTTTACCCTATGTTTACATCTTGAGGCAGCAGA GTCTGTCTGCAGCTATGTGGTGAGCTATGTAAGGAAAAAATCTGGGCTGTTAGAGTGAAAAAAGTGTGTTTTATG AGTTATTTCACTTGATTTGCTAGCTTCAGAGAAGAGATCCGAATCTGTGCCCAGCGCTAAAGGCTCAGTGTTAGC ATGGCTTGTGCTGGCCGGTGTGCCATATTCTTGTTGGAGATGAACCGTAGCACCAGAGCCCATTCTTCCTTGTCA GTCTTGGCCCAAAGATGTCACCATTCCTAGTTATTTGTCACCACATAATTGGTGTTGATTGGAAACTTTTTCTGA GCTTTTGGTCCTGTGTTGCTTTTAAAAACACCTTATAAAAGAGGAGAGTATTTGATAAGCAATTTTCATAGTAGT AAAGTTTTTTTCATCTCTTAAACTAAATTGACCATGCATATAATATTCTTTGTTTAAATGAAAGCATACTGTTG GCATCTGTTTTAGAAAAGGGGGAAATGAAGCAACTTGTCTAAAAATACTGCTTTACAAAGCATTTCAGCCTTTCC CCCTCAGTTTTGCATTGATTTTTTGACAAGTCTGTAGAGCCTAATAGTTTCCATCAAAGGCCTAGATCTCTTATT TAGCATTTTTTCAGCTCTTCTCTCAGAAGTTCAGCTGTTGAAACGAAAACTGTACTTTGTACCCTCACATACAA AGGGATCAAATTTGACCTGGTGTTATTTTAGCCCCAAATTTATGACATTACACAATATTAAAATGTAAATGTTTC TTTACCCAAACTACTTCTAGATATTCTAGTATTTGCTTCTGGTGGAATTAAATGACGGTAAAATTGGCTAATTAT TTGAATGAATGAATGGATGGATGTTTTGCATGCTCAATTTCTAGGTCCTTTGTCTAGAAAGGAAATTTGCCTCAG TTGAATTAGTGAAATATTTCTGTCGTTGATATTAAAAGTGACTTCTGAGTACAGTTAAGTTCCTCCTATTTGCCA CTGGGCTGTTGGTTAGAAGCATAGGTAACTGATTAAGTAGGTATGATACTGCATTTGAAATAAGTGGACACAAAC TATATGCAGATTCCTAGTAGCATGCCTTACCTACAGCACTATGTGCATTTGCTGTCACAATAAAGTATATTTTGT CTTGCAAA

1294/2682 FIGURE 1164

 ${\tt MGRIFLDHIGGTRLFSCANCDTILTNRSELISTRFTGATGRAFLFNKVVNLQYSEVQDRVMLTGRHMVRDVSCKNCNSKLGWIYEFATEDSQRYKEGRVILERALVRESEGFEEHVPSDNS$

1295/2682 FIGURE 1165

GCGACTCGTCCCGCCTTCTGGGGCACTAGTTTGACTTTGTGATTGGCTACTAGTATCAAGGAATCCCGGCGTGGA GAATTGCGTCCCCGAAATAGCTGACACACTAGGGGCTGTGGCCAAGCAGGGGTTTGATTTCCTCTGCATGCCTGT CTTCCATCCGCGTTTCAAGAGGGAGTTCATTCAGGAACCTGCTAAGAATCGGCCCGGTCCCCAGACACGATCAGA CCTACTGCTGTCAGGAAGGGACTGGAATACGCTAATTGTGGGAAAGCTTTCTCCATGGATTCGTCCAGACTCAAA AGTGGAGAAGATTCGCAGGAACTCCGAGGCGGCCATGTTACAGGAGCTGAATTTTGGTGCATATTTGGGTCTTCC CCATCACTCTTCCATGTTCTGGATGCGGGTACCCTTGGTGGCACCAGAGGACCTGAGAGATGATATAATTGAGAA TGCACCAACTACACACAGAGGAGTACAGTGGGGGAGGAAAACGTGGATGTGGTGGCACAACTTCCGGACTTT GTGTGACTATAGTAAGAGGATTGCAGTGGCTCTTGAAATTGGGGCTGACCTCCCATCTAATCATGTCATTGATCG CTGGCTTGGGGAGCCCATCAAAGCAGCCATTCTCCCCACTAGCATTTTCCTGACCAATAAGAAGGGATTTCCTGT TCTTTCTAAGATGCACCAGAGGCTCATCTTCCGGCTCCTCAAGTTGGAGGTGCAGTTCATCATCACAGGCACCAA CCACCACTCAGAGAAGGAGTTCTGCTCCTACCTCCAATACCTGGAATACTTAAGCCAGAACCGTCCTCCACCTAA TGCCTATGAACTCTTTGCCAAGGGCTATGAAGACTATCTGCAGTCCCCGCTTCAGCCACTGATGGACAATCTGGA ATCTCAGACATATGAAGTGTTTGAAAAGGACCCCATCAAATACTCTCAGTACCAGCAGGCCATCTATAAATGTCT GCTAGACCGAGTACCAGAAGAGGAGAAGGATACCAATGTCCAGGTACTGATGGTGCTGGGAGCAGGACGGGGACC CCTGGTGAACGCTTCCCTGCGGGCAGCCAAGCAGGCCGACCGGCGGATAAAGCTGTATGCTGTGGAGAAAAACCC AAATGCCGTGGTGACGCTAGAGAACTGGCAGTTTGAAGAATGGGGAAGCCAAGTGACCGTAGTCTCATCAGACAT GAGGGAATGGGTGGCTCCAGAGAAAGCAGACATCATTGTCAGTGAGCTTCTGGGCTCATTTGCTGACAATGAATT GTCGCCTGAGTGCCTGGATGGAGCCCAGCACTTCCTAAAAGATGATGGTGTGAGCATCCCCGGGGAGTACACTTC CTTTCTGGCTCCCATCTCTTCCTCCAAGCTGTACAATGAGGTCCGAGCCTGTAGGGAGAAGGACCGTGACCCTGA GGCCCAGTTTGAGATGCCTTATGTGGTACGGCTGCACAACTTCCACCAGCTCTCTGCACCCCAGCCCTGTTTCAC CTTCAGCCATCCCAACAGAGATCCTATGATTGACAACAACCGCTATTGCACCTTGGAATTTCCTGTGGAGGTGAA CACAGTACTACATGGCTTTGCCGGCTACTTTGAGACTGTGCTTTATCAGGACATCACTCTGAGTATCCGTCCAGA CCAAACCATCTGTGTGCGTTTCTGGCGATGCAGCAATTCCAAGAAGGTGTGGTATGAGTGGGCTGTGACAGCACC AGTCTGTTCTGCTATTCATAACCCCACAGGCCGCTCATATACCATTGGCCTC<u>TAG</u>CCCTGCGTGCCAAGTGTCCA GAGCCTTGGAAGCAGCTTCAGGTTCCTGCTCCTGTAGTACAGAAGGTGCAGTACATCTATGGGCTGTGATTCCCC GCAGGGCTCAAGCCACCAATCTATGAAGACCTCAGGCCAGGGGGTGAGGAATTAGTGCTGGATTTGAAGCTACGC ACTCAGCCTCAAGAACTCCCTGGAATATCCCTGAGAACATGGGGTTTGAACGGATTTTCAGCCTTTTTCTGTTCT AAAAAAAAAAAA

1296/2682 FIGURE 1166

MAAMAVGGAGGSRVSSGRDLNCVPEIADTLGAVAKQGFDFLCMPVFHPRFKREFIQEPAKNRPGPQTRSDLLLSG RDWNTLIVGKLSPWIRPDSKVEKIRRNSEAAMLQELNFGAYLGLPAFLLPLNQEDNTNLARVLTNHIHTGHHSSM FWMRVPLVAPEDLRDDIIENAPTTHTEEYSGEEKTWMWWHNFRTLCDYSKRIAVALEIGADLPSNHVIDRWLGEP IKAAILPTSIFLTNKKGFPVLSKMHQRLIFRLLKLEVQFIITGTNHHSEKEFCSYLQYLEYLSQNRPPPNAYELF AKGYEDYLQSPLQPLMDNLESQTYEVFEKDPIKYSQYQQAIYKCLLDRVPEEEKDTNVQVLMVLGAGRGPLVNAS LRAAKQADRRIKLYAVEKNPNAVVTLENWQFEEWGSQVTVVSSDMREWVAPEKADIIVSELLGSFADNELSPECL DGAQHFLKDDGVSIPGEYTSFLAPISSSKLYNEVRACREKDRDPEAQFEMPYVVRLHNFHQLSAPQPCFTFSHPN RDPMIDNNRYCTLEFPVEVNTVLHGFAGYFETVLYQDITLSIRPETHSPGMFSWFPILFPIKQPITVREGQTICV RFWRCSNSKKVWYEWAVTAPVCSAIHNPTGRSYTIGL

1297/2682 FIGURE 1167

GGCACGAGTGGGAGTACAGGACTCGCCTCCTCAGGGTTCCCTGTGCTGCCACTTTTCAGCC**ATC**GCCACAAGTGA ACAGAGTATCTGCCAAGCCCGGGCTTCCGTGATGGTCTACGATGACACCAGTAAGAAATGGGTACCAATCAAACC TGGCCAGCAGGGATTCAGCCGGATCAACATCTACCACAACACTGCCAGCAACACCTTCAGAGTCGTTGGAGTCAA GTTGCAGGATCAGCAGGTTGTGATCAATTATTCAATCGTGAAAGGGCTGAAGTACAATCAGGCCACGCCAACCTT CCACCAGTGGCGAGATGCCCGCCAGGTCTACGGCTTAAACTTTGCAAGTAAAGAAGAGGCAACCACGTTCTCCAA CCCACTGCCAGCCGGAGGAGCCCAGGGGTCCAGCCACGACGACGACGTCCATGTCAGGACTGCCGCTGCCATAGC TGGGGCCAAGCTGAGAAGAGTCCAACGGCCAGAAGACGCATCTGGAGGCTCCAGTCCCAGTGGGACCTCAAAGTC CGATGCCAACCGGGCAAGCAGCGGGGGTGGCGGAGGAGGCCTCATGGAGGAAATGAACAAACTGCTGGCCAAGAG CTCCCCTCTCCGGGGACCCGAGCAGCCAGCCACCTAACTCCTCAGAGGCTGGCCGGAAGCCCTGGGAGCG GAGCAACTCGGTGGAGAAGCCTGTGTCCTCGATTCTGTCCAGAACCCCGTCTGTGGCAAAGAGCCCCGAAGCTAA GAGCCCCTTCAGTCGCAGCCTCACTCTAGGATGAAGCCTGCTGGGAGCGTGAATGACATGGCCCTGGATGCCTT CGACTTGGACCGGATGAAGCAGGAGATCCTAGAGGAGGTGGTGAGAGGAGCTCCACAAGGTGAAGGAGGAGATCAT $\tt CGACGCCATCAGGCAGGAGCTGAGTGGGATCAGCACCACG{\color{red}{\textbf{TAA}}} GGGGCCGGCCTCGCTGCTGATTCGTCGAGC$ GGGCGCGCTGCTGTGAAACGTCCTGACCTGTGATCACACATGACAGTGAGGAAACCAAGTGCAACTCCTGGGTTT TTTTAGATTCTGCCTGACACGGAACACCAGGTCTGCTCGTCTTTTTTGTGTTTTATATTTGCTTATTTAAGGTAC ATTTCTTTGGGTTTCTAGAGACGCCCCTAAGTCACCTGCTTCATTAGACGGTTTCCAGGTTTTCTCCCAGGTGAC GCTGTTAGCGCCTCAGCTGGCGGTGACAGCCGGCCCAGCGTGGCGCCACCACACACCGCAGAGCTGTCCAGGCAC CGGTTTACTGTCCGCAAAAAAAAAAAAAAAAAAAAA

1298/2682 FIGURE 1168

 $\label{thm:contraction} $$ \text{MATSEQSICQARASVMYYDDTSKKWVPIKPGQQGFSRINIYHNTASNTFRVVGVKLQDQQVVINYSIVKGLKYNQ} $$ \text{ATPTFHQWRDARQVYGLNFASKEEATTFSNAMLFALNIMNSQEGGPSSQRQVQNGPSPDEMDIQRRQVMEQHQQQ} $$ \text{RQESLERRTSATGPILPPGHPSSAASAPVSCSGPPPPPPPPPTGATPPPPPPLPAGGAQGSSHDESSMSGLAAAIAGAKLRRVQRPEDASGGSSPSGTSKSDANRASSGGGGGLMEEMNKLLAKRRKAASQSDKPAEKKEDESQMEDPSTSPSPGTRAASQPPNSSEAGRKPWERSNSVEKPVSSILSRTPSVAKSPEAKSPLQSQPHSRMKPAGSVNDMALDAFDLDRMKQEILEEVVRELHKVKEEIIDAIRQELSGISTT}$

1299/2682 FIGURE 1169

GGGCTCTCTCCTTGTCAGTCGGCGCCGCGTGCGGGCTGGTGGCTCTGTGGCAGCGGCGGCGGCAGGACTCCGGCA $\mathtt{CT} \underline{\mathbf{ATG}} \mathtt{AGCGGCTTCAGCACCGAGGAGCGCCGCGCCCCTTCTCCCTGGAGTACCGAGTCTTCCTCAAAAATGAGA$ AAGGACAATATATATCTCCATTTCATGATATTCCAATTTATGCAGATAAGGATGTGTTTCACATGGTAGTTGAAG TACCACGCTGGTCTAATGCAAAAATGGAGATTGCTACAAAGGACCCTTTAAACCCTATTAAACAAGATGTGAAAA AAGGAAAACTTCGCTATGTTGCGAATTTGTTCCCGTATAAAGGATATATCTGGAACTATGGTGCCATCCCTCAGA CTTGGGAAGACCCAGGGCACAATGATAAACATACTGGCTGTTGTGGTGACAATGACCCAATTGATGTGTGAAA TTGGAAGCAAGGTATGTGCAAGAGGTGAAATAATTGGCGTGAAAGTTCTAGGCATATTGGCTATGACTAAGAAG GGGAAACCGACTGGAAAGTCATTGCCATTAATGTGGATGATCCTGATGCAGCCAATTATAATGATATCAATGATG TCAAACGGCTGAAACCTGGCTACTTAGAAGCTACTGTGGACTGGTTTAGAAGGTATAAGGTTCCTGATGGAAAAC CAGAAAATGAGTTTGCGTTTAATGCAGAATTTAAAGATAAGGACTTTGCCATTGATATTATTAAAAGCACTCATG **ACCATTGGAAAGCATTAGTGACTAAGAAAACGAATGGAAAAGGAATCAGTTGCATGAATACAACTTTGTCTGAGA** CAGTACCAACAGACGTGGATAAGTGGTTCCATCACCAGAAAAACTAATGAGATTTCTCTGGAATACAAGCTGATA TTGCTACATCGTGTTCATCTGGATGTATTAGAAGTAAAAGTAGCTTTTCAAAGCTTTAAATTTGTAGAACTC ATCTAACTAAAGTAAATTCTGCTGTGACTAATCCAATATACTCAGAATGTTATCCATCTAAAGCATTTTTCATAT CTCAACTAAGATAACTTTTAGCACATGCTTAAATATCAAAGCAGTTGTCATTTGGAAGTCACTTGTGAATAGATG AAAAAA

1300/2682 FIGURE 1170

MSGFSTEERAAPFSLEYRVFLKNEKGQYISPFHDIPIYADKDVFHMVVEVPRWSNAKMEIATKDPLNPIKQDVKK GKLRYVANLFPYKGYIWNYGAIPQTWEDPGHNDKHTGCCGDNDPIDVCEIGSKVCARGEIIGVKVLGILAMIDEG ETDWKVIAINVDDPDAANYNDINDVKRLKPGYLEATVDWFRRYKVPDGKPENEFAFNAEFKDKDFAIDIIKSTHD HWKALVTKKTNGKGISCMNTTLSESPFKCDPDAARAIVDALPPPCESACTVPTDVDKWFHHQKN

1301/2682 FIGURE 1171

GCGGCACGTAAGTGCGTGACGCTCGTCAGTGGCTTCAGTTCACASGTGGCGCCMGSASGMRGGTTGCTGTTTTG TGCTTCCTTCTACAGCCAAT**ATG**AAAAGGCCTAAGTTAAAGAAAGCAAGTAAACGCATGACCTGCCATAAGCGGT ATAAAATCCAAAAAAAGGTTCGAGAACATCATCGAAAATTAAGAAAGGAGGCTAAAAAAGCAGGGTCACAAGAAGC CTAGGAAAGACCCAGGAGTTCCAAACAGTGCTCCCTTTAAGGAGGCTCTTCTTAGGGAAGCTGAGCTAAGGAAAC AGAGGCTTGAAGAACTAAAACAGCAGCAGAAACTTGACAGGCAGAAGGAACTAGAAAAGAAAAAGAAAACTTGAAA CTAATCCTGATATTAAGCCATCAAATGTGGAACCTATGGAAAAGGAGTTTGGGCTTTGCAAAACTGAGAACAAAG CCAAGTCGGGCAAACAGAATTCAAAGAAGCTGTACTGCCAAGAACTTAAAAAGGTGATTGAAGCCTCCGATGTTG TCCTAGAGGTGTTGGATGCCAGAGATCCTCTTGGTTGCAGATGTCCTCAGGTAGAAGAGGCCATTGTCCAGAGTG GACAGAAAAAGCTGGTACTTATATTAAATAAATCAGATCTGGTACCAAAGGAGAATTTGGAGAGCTGGCTAAATT ATTTGAAGAAAGAATTGCCAACAGTGGTGTTCAGAGCCTCAACAAAACCAAAGGATAAAGGGAAGATAACCAAGC GTGTGAAGGCAAAGAAGAATGCTGCTCCATTCAGAAGTGAAGTCTGCTTTGGGAAAGAGGGCCTTTGGAAACTTC TTGGAGGTTTTCAGGAAACTTGCAGCAAAGCCATTCGGGTTGGAGTAATTGGTTTCCCAAATGTGGGGAAAAGCA GCATTATCAATAGCTTAAAACAAGAACAGATGTGTAATGTTGGTGTATCCATGGGGCTTACAAGGAGCATGCAAG TTGTCCCCTTGGACAAACAGATCACAATCATAGATAGTCCGAGCTTCATCGTATCTCCACTTAATTCCTCCTCTG CGCTTGCTCTGCGAAGTCCAGCAAGTATTGAAGTAGTAAAACCGATGGAGGCTGCCAGTGCCATCCTTTCCCAGG CTGATGCTCGACAGGTAGTACTGAAATATACTGTCCCAGGCTACAGGAATTCTCTGGAATTTTTTACTATGCTTG CTCAGAGAAGAGGTATGCACCAAAAAGGTGGAATCCCAAATGTTGAAGGTGCTGCCAAACTGCTGTGGTCTGAGT GGACAGGTGCCTCATTAGCTTACTATTGCCATCCCCCTACATCTTGGACTCCTCCATCATATTTTAATGAGAGTA TTGTGGTAGACATGAAAAGCGGCTTCAATCTGGAAGAACTGGAAAAGAACAATGCACAGAGCATAAGAGCCATCA AGGGCCCTCATTTGGCCAATAGCATCCTTTTCCAGTCTTCCGGTCTGACAAATGGAATAATAGAAGAAAAGGACA TACATGAAGAATTGCCAAAACGGAAAGAAAGGAAGCAGGAGGAGGAGGAGGATGACAAAGACAGTGACCAGGAAA CTGTTGATGAAGAAGTTGATGAAAACAGCTCAGGCATGTTTGCTGCAGAAGAGACAGGGGAGGCACTTCTGAGGA GACTACAGCAGGTGAACAGTCTACAAGGTCTTTTATCTTGGATAAAATCATTGAAGAGGATGATGCTTATGACTT TGTTCTCTGTATAAGTTATGGTATGCATGAGCTGTGTAAATTTTGTGAATATGTATTATATAAAACCAGGCAAC TTGGAATCCCTAAATTCTGTAAAAAGACAATTCATCTCATTGTGAGTGGAAGTAGTTATCTGGAATAAAAAAAGA AGATACCTATTGAAAAAAAAAAAAAAAAAAAAAAAA

1302/2682 FIGURE 1172

MKRPKLKKASKRMTCHKRYKIQKKVREHHRKLRKEAKKQGHKKPRKDPGVPNSAPFKEALLREAELRKQRLEELK QQQKLDRQKELEKKRKLETNPDIKPSNVEPMEKEFGLCKTENKAKSGKQNSKKLYCQELKKVIEASDVVLEVLDA RDPLGCRCPQVEEAIVQSGQKKLVLILNKSDLVPKENLESWLNYLKKELPTVVFRASTKPKDKGKITKRVKAKKN AAPFRSEVCFGKEGLWKLLGGFQETCSKAIRVGVIGFPNVGKSSIINSLKQEQMCNVGVSMGLTRSMQVVPLDKQ ITIIDSPSFIVSPLNSSSALALRSPASIEVVKPMEAASAILSQADARQVVLKYTVPGYRNSLEFFTMLAQRRGMH QKGGIPNVEGAAKLLWSEWTGASLAYYCHPPTSWTPPPYFNESIVVDMKSGFNLEELEKNNAQSIRAIKGPHLAN SILFQSSGLTNGIIEEKDIHEELPKRKERKQEEREDDKDSDQETVDEEVDENSSGMFAAEETGEALLRRLQQVNS LQGLLSWIKSLKRMMLMTSVQIMCNRTMAFYDFFF

1303/2682 FIGURE 1173

AGCCGGATTGAAACAAGATGGCGGGTTCGTGGTGAGAAGCCGTCAAGGAGTAGAAATTGGTATGCTTAGAAGCAG ${\tt ATTCTAAAAGCAGTTTCTCTTCAGAACATCTTTTTCATACCACTTGATAAGCATCTTGAAACACC{\tt ATG}{\tt GCTGTA}$ TGTGTTTGTCATAAATCTACGTATTCTCCTCTACCAGATGACTATAATTGCAACGTAGAGCTTGCTCTGACTTCT GATGGCAGGACAATAGTATGCTACCACCCTTCTGTGGACATTCCATATGAACACACAAAACCTATCCCTCGGCCA GATCCTGTGCATAATAATGAAGAAACACATGATCAAGTGCTGAAAACCAGATTGGAAGAAAAGTTGAACACCTT GAGGAAGGACCTATGATAGAACAACTTAGCAAAATGTTCTTTACTACTAAGCACCGTTGGTATCCTCATGGACGG ${\tt TATCACAGATGTCGTAAGAATCTGAATCCTCCAAAAGACAGA} {\tt TGA} {\tt TGCGGAGGTTCCTGGGGGGAATCAAAGAGAA}$ ATGTGCCTCATTTGCCATTTGAGAAAATGCAGTCTGGTGTATTCAGTAATATATAGTAAAGTAATAATGATAAAA TATCTTTTCATATATTAGAATGTGTACTTTTATATAAAGTAATTCTGGATTTGACATTCTCATTTAGAGAAACCT ATTTTCTTTTTCTTTTTCTATTTTAGTGTTTCATTTATGTGCGGTCTCCAATTTAGGACTTTTCCATAGTGCCA AAGCCATACATATTCAGTAGAACATCAATAAATTCATCAGAAATTCAAACACTTTATTATAAAACGGGCTTCGTG TTAGATAATTTTGCTAAACAGTAGGCTACTGTAAGTGTTCTGAGCATATTTAAGCAGGCTAGCATTTTCAATTTA CAATATTTTCAACTGATAGTAGGTTTATTGGGATGTAACCCTATGATAAGTTGAGAAACATCTCTTTTTGTGTGT CTACTGTGATTTAAGTATTTTTAATCATCAGCCAAGCATTGTTAGTAGTATAAATATGATTAATAAAAATGTGCA

1304/2682 FIGURE 1174

 ${\tt MAVAAVKWVMSKRTILKHLFPVQNGALYCVCHKSTYSPLPDDYNCNVELALTSDGRTIVCYHPSVDIPYEHTKPIPRPDPVHNNEETHDQVLKTRLEEKVEHLEEGPMIEQLSKMFFTTKHRWYPHGRYHRCRKNLNPPKDR}$

1305/2682 FIGURE 1175

ACAGGGGAAATACCGCGGCGCCGGTAGTTGCTGTGGTTTCCGTTCTGAGCTCGCAGCTTAGGAGCTGAAGATCGC GGACTTAGCGTTGCCGCGTCCGAGTCCGGCCATCAGTGGCTGCAGATCCGGAGCCAGGAGCTCAACCACCCTTCT TCGGAACAGGGCCGGCCTGCTGCTGCTCCTCGACGCTCGGTGCCTGTATCTACTCCGGGGCCTAGGTCGGCTCC GGGGGCGGCTTAGGAGAAGGCCGCCGGCGAG<u>ATG</u>TTCAAAAACACGTTCCAGAGCGGCTTCCTCCATCCTCTA CAGCATCGGCAGCCAGCCTCTGCAAATCTGGGACAAAAAGGTACGGAATGGCCACATCAAAAGAATCACTGATAA TGACATCCAGTCCCTGGTGCTAGAGATTGAAGGGACAAATGTAAGCACCACATATATCACATGCCCTGCAGACCC CAAGAAGACGCTGGGAATTAAACTTCCTTTCCTTGTCATGATTATCAAAAACCTGAAGAAGTATTTTACCTTCGA AGTGCAGGTACTAGATGACAAGAATGTGCGTCGTCGCTTTCGGGCAAGTAACTACCAGAGCACCACCCGGGTCAA ACCCTTCATCTGCACCATGCCCATGCGGCTGGATGACGGCTGGAACCAGATTCAGTTCAACTTGCTAGACTTCAC ACGGCGAGCATACGGCACCAATTACATCGAGACCCTCAGAGTGCAGATCCATGCAAATTGTCGCATCCGACGGGT TTACTTCTCAGACAGACTCTACTCAGAAGATGAGCTGCCGGCAGAGTTCAAACTGTATCTCCCAGTTCAGAACAA GGCAAAGCAA<u>TAA</u>CTGGAATTGTGACTCGAGGGATAGACCCCTGGATGTGACTCTTCTTTTAAAAGGAAACTAT GTCATGGACACCGGTGAACATGCCGTAACTCTGTGACTGCATTGTAAGTGCAGTGGGGGGTAAGCAGTCCTGTGAG TGGCGCATGAACGCTGGAGCTTATTCCGCCGCCTGCCCCAGTGTGGGGGGAGATACCTTTACCATGAACTTACAG AAATATATGTATATGCTGTGTCATACTCATAATCTGGAAATGAATAAAGTGATATATTCCTGGTTTGTAAAAAAA AAA

1306/2682 FIGURE 1176

 $\label{thm:mass} MFKNTFQSGFLSILYSIGSKPLQIWDKKVRNGHIKRITDNDIQSLVLEIEGTNVSTTYITCPADPKKTLGIKLPF\\ LVMIIKNLKKYFTFEVQVLDDKNVRRFFRASNYQSTTRVKPFICTMPMRLDDGWNQIQFNLLDFTRRAYGTNYIE\\ TLRVQIHANCRIRRVYFSDRLYSEDELPAEFKLYLPVQNKAKQ$

1307/2682 FIGURE 1177

1308/2682 FIGURE 1178

 ${\tt MANIHQENEEMEQPMQNGEEDRPLGGGEGHQPAGNRRGQARRLAPNFRWAIPNRQINDGMGGDGDDMEIFMEEMREERRKLRELQLRNCLRILMGELSNHHDHHDEFCLMP}$

1309/2682 FIGURE 1179

1310/2682 FIGURE 1180

MELFLAGRRVLVTGAGKGIGRGTVQALHATGARVVAVSRTQADLDSLVRECPGIEPVCVDLGDWEATERALGSVG PVDLLVNNAAVALLQPFLEVTKEAFDRSFEVNLRAVIQVSQIVARGLIARGVPGAIVNVSSQCSQRAVTNHSVYC STKGALDMLTKVMALELGPHKIRVNAVNPTVVMTSMGQATWSDPHKAKTMLNRIPLGKFAEVEHVVNAILFLLSD RSGMTTGSTLPVEGGFWAC

FIGURE 1181

CGGCGACTGACCGTGGTCGTGGGCGGACGGCGGCTTGCAGCGTGGAGGAGCTGGGGTCGCTGTGGGTCGCGAAGC AGAGCCCGGGACGTGCGCGCTTGGTGCACGATCCTGAAGGGGAGCTCCGAGGGGCCCGGGTCGCCAGGGCTGCTG CGGCCATTCCCGGAGCCCGGGGGGCCCGCGAGATACTGGTTTAGGCCGTCCCAGGGCTCCGGGCGCACCCGG TGGCCGCTGCTGCAGCGGAGGGAGCGCGGGGCGCGGGGGGCTCGGAGACAGCGTTTCTCCCGGAAGTCTTCCTCG AGCCCTGCGGGGGCCCTGCTGGGCTGCCTGCCTGGCGTTGCTTTGCCTGGGCGGTGCGGACAAGCGCCTGCG TGACAACCATGAGTGGAAAAAACTAATTATGGTTCAGCACTGGCCTGAGACAGTATGCGAGAAAATTCAAAACGA CTGTAGAGACCCTCCGGATTACTGGACAATACATGGACTATGGCCCGATAAAAGTGAAGGATGTAATAGATCGTG GCCCTTCAATTTAGAAGAGATTAAGGATCTTTTGCCAGAAATGAGGGCATACTGGCCTGACGTAATTCACTCGTT TCCCAATCGCAGCCGCTTCTGGAAGCATGAGTGGGAAAAGCATGGGACCTGCGCCCCAGGTGGATGCGCTCAA CTCCCAGAAGAAGTACTTTGGCAGAAGCCTGGAACTCTACAGGGAGCTGGACCTCAACAGTGTGCTTCTAAAATT GGGGATAAAACCATCCATCAATTACTACCAAGTTGCAGATTTTAAAGATGCCCTTGCCAGAGTATATGGAGTGAT ACCCAAAATCCAGTGCCTTCCACCAAGCCAGGATGAGGAAGTACAGACAATTGGTCAGATAGAACTGTGCCTCAC AAATGGGGCCGCCGAGAGCCGGGGTCTGAGAGTCTGTGAAGATGGCCCAGTCTTCTATCCCCCACCTAAAAAGAC CAAGCAT**TGA**TGCCCAAGTTTTGGAAATATTCTGTTTTAAAAAGCAAGAGAAATTCACAAACTGCAG

1312/2682 FIGURE 1182

MRPAALRGALLGCLCLALLCLGGADKRLRDNHEWKKLIMVQHWPETVCEKIQNDCRDPPDYWTIHGLWPDKSEGC NRSWPFNLEEIKDLLPEMRAYWPDVIHSFPNRSRFWKHEWEKHGTCAAQVDALNSQKKYFGRSLELYRELDLNSV LLKLGIKPSINYYQVADFKDALARVYGVIPKIQCLPPSQDEEVQTIGQIELCLTKQDQQLQNCTEPGEQPSPKQE VWLANGAAESRGLRVCEDGPVFYPPPKKTKH

1313/2682 FIGURE 1183

GAATTCCGAGCTTTTTATTCCTAAGAGGAGAAAATCAGTAACGGGAGAAGCAGGAGGATGTCCAGAAGAAATTTC ATCCCTTGCTCTCGCCCTACTCTTTCTGGTGTTAGATCGAGCTACCCTCTAAAAGCAGTTTAGAGTGGTAAAAA AAAAAAAACACACCAAACGCTCGCAGCCACAAAAGGG**ATG**AAATTTCTTCTGGACATCCTCCTGCTTCTCCCGT TACTGATCGTCTGCTCCTAGAGTCCTTCGTGAAGCTTTTTATTCCTAAGAGGAGAAAATCAGTCACCGGCGAAA TGGTTCTCTGGGATATAAATAAGCATGGACTGGAGGAAACAGCTGCCAAATGCAAGGGACTGGGTGCCAAGGTTC ATACCTTTGTGGTAGACTGCAGCAACCGAGAAGATATTTACAGCTCTGCAAAGAAGGTGAAGGCAGAAATTGGAG AAAAGACTTTTGAAGTTAATGTACTTGCACATTTCTGGACTACAAAGGCATTTCTTCCTGCAATGACGAAGAATA ACCATGGCCATATTGTCACTGTGGCTTCGGCAGCTGGACATGTCTCGGTCCCCTTCTTACTGGCTTACTGTTCAA GCAAGTTTGCTGCTGTTGGATTTCATAAAACTTTGACAGATGAACTGGCTGCCTTACAAATAACTGGAGTCAAAA CAACATGTCTGTGTCCTAATTTCGTAAACACTGGCTTCATCAAAAATCCAAGTACAAGTTTGGGACCCACTCTGG TAGCTTTTTTAACAACATTGGAAAGGATCCTTCCTGAGCGTTTCCTGGCAGTTTTAAAACGAAAAATCAGTGTTA AGTTTGATGCAGTTATTGGATATAAAATGAAAGCGCAA<u>TAA</u>GCACCTAGTTTTCTGAAAACTGATTTACCAGGTT TAGGTTGATGTCATCTAATAGTGCCAGAATTTTAATGTTTGAACTTCTGTTTTTTCTAATTATCCCCATTTCTTC AATATCATTTTGAGGCTTTGGCAGTCTTCATTTACTACCACTTGTTCTTTAGCCAAAAGCTGATTACATATGAT ATAAACAGAGAAATACCTTTAGAGGTGACTTTAAGGAAAATGAAGAAAAAGAACCAAAATGACTTTATTAAAATA TTATTTTTGATTGCACTTAAATTTTGTATAATTTGTGTTTCTTTTTCTGTTCTACATAAAATCAGAAACTTCAAG CTCTCTAAATAAAATGAAGGACTATATCTAGTGGTATTTCACAATGAATATCATGAACTCTCAATGGGTAGGTTT CATCCTACCCATTGCCACTCTGTTTCCTGAGAGATACCTCACATTCCAATGCCAAACATTTCTGCACAGGGAAGC TAGAGGTGGATACACGTGTTGCAAGTATAAAAGCATCACTGGGGGGATTTAAGGAGAATTGAGAGAATGTACCCAC AAATGGCAGCAATAATAAATGGATCACACTTAACG

1314/2682 FIGURE 1184

MKFLLDILLLPLLIVCSLESFVKLFIPKRRKSVTGEIVLITGAGHGIGRLTAYEFAKLKSKLVLWDINKHGLEE TAAKCKGLGAKVHTFVVDCSNREDIYSSAKKVKAEIGDVSILVNNAGVVYTSDLFATQDPQIEKTFEVNVLAHFW TTKAFLPAMTKNNHGHIVTVASAAGHVSVPFLLAYCSSKFAAVGFHKTLTDELAALQITGVKTTCLCPNFVNTGF IKNPSTSLGPTLEPEEVVNRLMHGILTEQKMIFIPSSIAFLTTLERILPERFLAVLKRKISVKFDAVIGYKMKAQ

1315/2682 FIGURE 1185

GGCACGAGGGTGAGCGCTCGCAAGAGGACGCCAGAGGCCCCGGCAGCTCGGAGCTCCGGGACCTTGTGGCGCATCA GGACGCGGCTGTCCCTCTGCCGGGACCCAGAGCCGCCGCCGCCGCTCTGCCTCCTGCGTGTTAGCCTCCTCTGCG CGCTCCGGGCAGGCGGCCGTGGGAGCCGCTGGGGCGAGGAGGCTGCTGCTGCTGCCCCCGGCCCGCC CGGCTGGAAACGGAGGCCGAGCCAAGCGGCGCCCCTCTTATGCTGGGAGGATCCTGGAGAGTAGCGGCTGCA AAGCGCTGAAGGAGGGCGTGCTGGAGAAGCGCAGCGACGGTTGTTGCAGCTCTGGAAGAAAAAGTGTTGCATCC AGCAGCAACAACAGCCCGGGCAGGGCCGGCCGAGCCGTCCCAACCCAGTGGCCCCGCTGTCGCCAGCCTCGAGC CGCCGGTCAAGCTCAAGGAACTGCACTTCTCCAACATGAAGACCGTGGACTGTGTGGAGCGCAAGGGCAAGTACA AGATCACGCTGCAGATGGTGCAGTACAAGAATCGTCAGGCCATCCTGGCGGTCAAATCCACGCGGCAGAAGCAGC AGCACCTGGTCCAGCAGCCCCCCTCGCAGCCGCAGCCGCAGCCCCAGCCCCAACCCCAGCCTCAGC CTCAGCCGCAACCCCAGCCCCAATCACAACCCCAGCCTCAGCCCCAACCCAAGCCTCAGCCCCAGCAGCTCCACC CGTATCCGCATCCACATCCACATCTACATCTCATCCTCACTCGCACCCACACCCTCACCCGCACCCGCATCCGC ACCAAATACCGCACCCACACCCACAGCCGCACTCGCAGCCGCACGGGCACCGGCTTCTCCGCAGCACCTCCAACT $\verb|CTGCCTGAAAGGGGCAGCTCCCGGGCAAGACAAGGTTTTGAGGACTTGAGGAAGTGGGACGAGCACATTTCTATT| \\$ GTCTTCACTTGGATCAAAAGCAAAACAGTCTCTCCGCCCCGCACCAGATCAAGTAGTTTGGACATCACCCTACTG AAAACTTGCGATTCTTCTTAGTTTTCTGCATACTTTTCATCACGATGCAGGAAACGATTTCGAGTCAAGAAGACT $\tt TTTATTTATGAACCTTTGAAAGGATCGTCTTGTATGGTGAATTTTCTAGGAGCGATGATGTACTGTAATTTTATT$ TTAATGTATTTTGATTTATGATTATTATTAGTTTTTTTAAATGCTTGTTCTAAGACATTTCTGAATGTAGACC ATTTTCCAAAAAGGAAACTTTATTTTCAAAAACCTAATCCGTAGTAATTCCTAATCTTGGAGAATAAAAAAGGGC GGTGGAGGGGAAAACATTAAGAATTTATTCATTATTTCTCGAGTACTTTCAGAAAGTCTGACACTTTCATTGTTG ΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑ

1316/2682 FIGURE 1186

1317/2682 FIGURE 1187

CCCGAGACCACGTGGCCTCCGAGCAGCTCAGGGCGCCCTTGAAAGTTCTTGGATCTGCGGGTT<u>ATC</u>GCCGGTCCC TTGCAGGGCGGTGGGGCCCGGGCCCTGGACCTACTCCGGGGCCTGCCGCGTGTGAGCCTGGCCAACTTAAAGCCG AATCCCGGCTCCAAGAAACCGGAGAGAGAGACCAAGAGGTCGGAGAAGAGGTAGAAAATGTGGCAGAGGCCATAAA AAATACGGGTTTAACGAAGGACATAGTTTCAGACGCCAGTATAAGCCTTTGAGTCTCAATAGACTGCAGTATCTT ATTGATTTGGGTCGTGTTGATCCTAGTCAACCTATTGACTTAACCCAGCTTGTCAATGGGAGAGGTGTGACCATC CAGCCACTTAAAAGGGATTATGGTGTCCAGCTGGTTGAGGAGGGTGCTGACACCTTTACGGCAAAAGTTAATATT GAAGTACAGTTGGCTTCAGAACTAGCTATTGCTGCCATTGAAAAAAATGGTGGTGTTGTTACTACAGCCTTCTAT CTTCCACCAGAAGAACTGGTACCATATTACACTGATGCAAAGAACCGTGGGTACCTGGCGGATCCTGCCAAATTT CCTGAAGCACGACTTGAACTCGCCAGGAAGTATGGTTATATCTTACCTGATATCACTAAAGATGAACTCTTCAAA ATGCTCTGTACTAGGAAGGATCCAAGGCAGATTTTCTTTGGTCTTGCTCCAGGATGGGTGGATATATGGCCGAT AAGAAAATCCTAAAACCTACAGATGAAAATCTCCTTAAGTATTATACCTCA**TGA**ATTCCCGTCCAAGGAAGCAGA GTTGTTAAAGAGTACTGGAATAGGGGCTGAAGGATCTATATTCCCTTATTGCATTTTCCTTATGTATAATTTTCC AGATGGTGATGTTACTTTTCAGTGTACTCATATGTCTCATTTTCATCTAAAATTAAATGGCAGGAAACAAGGACT GCATAGAGAAAAAAAAAAAAAAAAAAAAAAA

1318/2682 FIGURE 1188

MAGPLQGGGARALDLLRGLPRVSLANLKPNPGSKKPERRPRGRRKCGRGHKGERQRGTRPRLGFEGGQTPFY IRIPKYGFNEGHSFRRQYKPLSLNRLQYLIDLGRVDPSQPIDLTQLVNGRGVTIQPLKRDYGVQLVEEGADTFTA KVNIEVQLASELAIAAIEKNGGVVTTAFYDPRSLDIVCKPVPFFLRGQPIPKRMLPPEELVPYYTDAKNRGYLAD PAKFPEARLELARKYGYILPDITKDELFKMLCTRKDPRQIFFGLAPGWVVNMADKKILKPTDENLLKYYTS

1319/2682 FIGURE 1189

GGTATCGATAAGCTTGATATCGAATTCGGCACGAGGCCGGGGCCCGCGGGGCTGCTGCGGGGCGATCGGGCCGGGC CGCTGCCGCGCCATGGACTCCCGTGTCCAGCCTGAGTTCCAGCCTCACTGAGTGGCCACCCCCAAAGTGCTGCCA ${\tt GCCGAGGAAGCCCCAGCACTGACC} \underline{{\tt ATG}} {\tt TCTATTATGGACCACAGCCCCACCACGGGCGTGGTCACAGTCATTGT}$ CATCCTCATTGCCATCGCGGCCCTGGGGGCCTTGATCCTGGGCTGCTGCTGCTGCTGCGGCTGCAGCGCATCAG CCAGTCAGAGGACGAGGAGCATCGTGGGGGGATGGGGAGCCAAGGAACCCTTCCTGCTGGTGCAGTATTCGGC ${\tt CAAGGGACCGTGCGTGGAGAGAAGGCCAAGCTGATGACTCCCAACGGCCCGGAAGTCCACGGC} {\color{red}{\bf TGA}} {\tt CCAGGAT}$ GCAAGGCTCCTGGTCCTGTTTGCAGCCGGCCAAGAGGCGCTGGGAGGGGCAAAACCATACGGATGCGCTGCTGTC TGAGAGGAAGGGCTGACACTTGCTGGCATGGCCTCTGCGGGCTTCGTCATCGCATGCACTGATGCCCGGGGACCT GGCTGTCCTGGGCTTCCCCTCGGCCTCCAGGTGAGGCTGCCCATTGCAGGCACTGGGCAGGCCTGACCTTGCTGG GGCTCATGGCCCTGTAGCGCTTTTGTTACTTGAATGTCTAGCTGAGCCTGTTTTTGATGGAGCTACTACTGTAAT GCGTGAACTAACAAACCTGTGAACTGTAAATAGGCCCCTGGAAGCACGTGCTTAAGCCCCTTTTGCTGATTTTTAA AAATATCATCTAGCGCACACGGGACTGGTATTCTGGCTGTACTAATGACAAGCTGAGTCAAGACCCTGGAGGGTC ATAGGCTTGTAAAGGCCCACGCCACACTCGGCAGGGGTCTCTCATGTGTGTCCATCTGCGTGTATGTCAAGGAAG TGAGATGCCAATTTGGGGTCTTGAGGCTGACCAGTTGGGGTGCTTGGGTGATCTCTGCTTCGTTAGTCATGGGTG GAAGAAAACCACACCYCYMRMRCCCCTCCGTTCTTTCTGCATAGACTCACTTGTTAAATAGCAGTTCTGTTGAG AGTGGAGTTACTGCAGGGAAGCTACCGGACCTGCCTGGGAGCCAGTGAAGGGCGAGTCAGGGCACGCGTCCTGGA GGCTGCCAGCGTCCTTGTAGCAGAGCAGTTTCTTGCCGCTTGGGTCTTCAGCACGCCAAGCCCCACCAACCCT CCACCCCGAGTGAAGGCTTCGCTGAAATTGCTTTGGTCCTCATAGAGCCTGTGGTGGCTACTTTTGGTCTGAAA CCCACTTGGCCCAGGAAAGAGAAAAGGTTGTATGTTTTGTGTTGGTGTTTCCTATTTTCTGCACTGGAGGGGAGG GGACTGTTGAGGTTCTGTCTTTTTCTTCTTTTCCTCTTCCCTCTTCACATCACTTGGCTTCCTTTCCTCTGA TGACCGTCCGCCTATGGGGTTCTGACTTCACTTTCCTCAGCGGGTCTCCAGTCCCCTGACCCAGCTCTAAAGGCA CTTAGGACCCAGGGAACATTTCTCACGTGCACATTCCCCTAAGAGCCACCAGACTGCTTCCTGCCAGCCTGTGCT TGCGGCAGGGAGCCGGGGCAGGGCAGAGGTGACTTGAAAGTTCAGGACTTGACTCTCCCACAGGTGGTGAGCTGG TGGCTCTCTGGTGAGCTAGTGTCTCCACAGMCWVTCTCCAAAGGCTCCCCTATGTACATTTGAGTGAGCTCACTT TAATAGATGGAAGGTCAGCCCCGGCTTAACCACAGAGCACTGGCCCTTCATGGCTGAGCTCAGAGCTCTGGCCTC TGGAACCCCGAGGCGGGAGAAGTAGGGAGCTGTTCGTTTAAGCAGCATACACCTAAATTGGGGGTTTAAACATTA AGTAGGAGCTTGGGGTGGAAGAGGGACAGCCGGCTGGGCCACCTGAGCAGAAGGTGGTAATGAAACACCTCAGCT GGGCTCTTGGGAGACCTTAGGAAGCAGGAGAGGCAACACCTCTGGCTACTGATGGTGTGGCAAGTTCAGAAGAGG AACCAGGCCTAGGAGGGAGAACAAGTTCCAAAGGTGCCGACTGGAAGAAGGGGGGTAAAAGTTTGCTTTGGTGAGT GAGAAAAGGCTGGGGCGTGTGATCCATCCCCTCACGTTTCAGAACTTCCAGGCTTTCTACCTCGACTCTCACCAC AGCCAGCACATACACCTAGGCTGTTTTTCCTTCCTCCACACCTGAGGGACGCAGCAACAGCTAGGATCTGCATTT TCAGGTTCCGAGCCTGACCCCTGGAACTGACCAGCGCTCGATTGTCAGCCTTGGCCTGGGGTTTTGACCTTGCCA GTGAAGTTTCGGTTTTGAAGTGATTAAATGTCACTTCCTCATCAGTTTCACTTCTGGAGGTTTTCTTATCCTACT CCCTGGTGCCAGGGACGTACCTGGGAGTTTGAATCAGGCCCATTTGAGCGTGGCAGCCGTGTTGGGTGAAGGTCC GGGGCTCGGTGAGGCACTGGGGGGGTTTTCGGGAGGAAAATGAAAATGCTTCTAGAATGAGTGAACCACATCATA GCTCTCACTGTTTTTCAATAGCTACTTTTTTTAGCAGACACCAGAGCCACACTCAAATGGCTAAGTAGGTTATG ACCTCTCTGGATTATTTTTGAATGCCCAACTGTTGCAATTCAAGTTTTCTGAACTAATAAGAAATTAAGCATTCA CTAATTTTTTGGACAAATCTTCAAACGGACTGTGCTACTGTATTTGTCTCAAAGCTACCAAGTTTGTGCAATAAG TGGAAGGGATGTCATCCTTCTTCAATAAATGCTGAATGACATTCAAGCTGATTTTCTAGACCACTGAGAAAATCT

1320/2682 FIGURE 1190

 ${\tt MSIMDHSPTTGVVTVIVILIAIAALGALILGCWCYLRLQRISQSEDEESIVGDGETKEPFLLVQYSAKGPCVERKAKLMTPNGPEVHG}$

1321/2682 FIGURE 1191

 ${\tt GGAGCTCTGGAGGCGGGGCTTCGAGCGTGGCTCGTGGGTTTTCCGTGAAGTCGCGGTGCAGCGGTGGGCGGC\underline{\bf ATG}$

1322/2682 FIGURE 1192

MSVAGGEIRGDTGGEDTAAPGRFSFSPEPTLEDIRRLHAEFAAERDWEQFHQPRNLLLALVGEVGELAELFQWKT DGEPGPQGWSPRERAALQEELSDVLIYLVALAARCRVDLPLAVLSKMDINRRRYPAHLARSSSRKYTELPHGAIS EDQAVGPADIPCDSTGQTST

1323/2682 FIGURE 1193

GGCACGAGGCAGAGGGCGGTTCCTGGAGTTACAGCCGCGTTTGCGGGACGTGTCTGCGCGGCAGTCCTGGCCTGT TGAGCTTGTCCAGACGAAGCCTCGCAGGGATGGGTTGGAGCCTGGGCCGGGCTTCGCTCAGGCAGCGTTTGAGGC $\tt CCCTAGACTAGGGGCCGCCATCTCC{\color{red} ATG} GCCACGGCCGTGAGCCGGCCCTGCGCCGGCAGGTCGCGGGACATACT$ GTGGCGCGTTTTGGGCTGGAGGATAGTTGCAAGTATTGTTTGGTCAGTGCTATTTCTACCCATCTGCACCACAGT ATTTATAATTTTCAGCAGGATTGATTTGTTTCATCCTATACAGTGGCTGTCTGATTCTTTCAGTGACCTGTATAG TTCCTATGTAATCTTTTACTTCCTGCTGCTGTCAGTGGTAATAATAATAATAAGTATTTTCAATGTGGAGTTCTA CTCATTTATTCATGCTGCAATGGGAATGGTGATGGCCTGGTGTGCTGCAGTGATAACCCAGGGCCAGTACAGCTT TCTTGTGGTTCCCTGCACTGGTACTAACAGCTTTGATAGCCCTGCTGCGCAAACCTGCTTAAATGAATATCATCT TTTTTTCCTACTGACTGGAGCATTTATGGGCTATAGCTATAGCCTCCTGTATTTTGTTAACAACATGAACTATCT TCCATTTCCCATCATACAGCAATACAAGTTCTTGCGTTTTAGGAGATCTCTGCTCTTATTAGTTAAACACAGTTG TGTGGAATCACTGTTCCTGGTTAGAAATTTCTGCATTTTATATTATTTTCTTGGCTATATTCCCAAAGCTTGGAT CTCGTTACTCTACCATGTCTGGCTGTGTGTGTCTTTCTCCTGACGACTTGGTATGTCTCATGGATACTCTTCAA AATCTATGCCACAGAGGCTCATGTGTTTCCTGTTCAACCACCATTTGCAGAAGGGTCAGATGAGTGCCTTCCAAA AGTGTTAAATAGCAATCCTCCCCCCATCATAAAGTATTTAGCCTTGCAGGACCTGATGTTGCTTTCTCAATATTC TCCTTCACGAAGACAAGAAGTTTTCAGCCTCAGCCAACCAGGTGGACATCCCCCACAATTGGACAGCCATTTCAAG GGAGTGTTTGAATCTTTTAAATGGTATGACTCAGAAACTGATTCTCTATCAAGAAGCTGCTGCTACGAATGGGAG AGTGTCTTCATCTTACCCAGTGGAACCTAAGAAATTAAATTCTCCAGAAGAAACTGCTTTTCAGACACCAAAATC TAGCCAGATGCCTCGGCCTTCAGTGCCACCATTAGTTAAAACATCACTGTTTTCTTCAAAATTATCTACACCTGA TGTTGTGAGCCCATTTGGGACCCCATTTGGCTCTAGTGTAATGAATCGGATGGCTGGAATTTTTGATGTAAACAC CTGCTATGGGTCACCGCAAAGTCCTCAGCTAATAAGAAGGGGGCCCAAGATTGTGGACATCAGCTTCTGATCAGCA AATGACTGAATTTTCTAATCCTTCTCCATCTACCTCTATTAGTGCTGAGGGTAAGACAATGAGACAACCCAGTGT GATTTATTCATGGATTCAGAATAAACGTGAACAGATTAAGAATTTCTTGŢCAAAACGGGTGCTGATAATGTATTT TTTCAGTAAGCACCCAGAGGCCTCCATTCAGGCTGTTTTTTCAGATGCCCAAATGCATATTTGGGCATTAGAAGG TCTGTCGCACTTAGTAGCAGCATCATTTACAGAGGATAGATTTGGAGTTGTCCAGACGACACTACCAGCTATCCT TAATACTTTGTTGACACTGCAAGAGGCAGTCGACAAGTACTTTAAGCTTCCTCATGCTTCCAGTAAACCACCCCG GATTTCAGGAAGCCTTGTGGACACTTCATATAAAACATTAAGATTTGCATTCAGAGCATCACTGAAAACTGCCAT CTATCGAATAACTACTACATTTGGTGAACATCTGAATGCTGTGCAAGCATCTGCAGAACATCAGAAAAGACTTCA ACAGTTCTTGGAGTTCAAAGAA<mark>TAG</mark>TTAAGTAATATAAACTGTGTTCATTACACTGCTGATACAACTACAGATGG GACAGTAAATGTTCAGCATTCTTGGATCAGAAGAAAACGGACTAATTAGATGCTTCCTTTGTCGTGGTGGTTGCT

1324/2682 FIGURE 1194

MATAVSRPCAGRSRDILWRVLGWRIVASIVWSVLFLPICTTVFIIFSRIDLFHPIQWLSDSFSDLYSSYVIFYFL
LLSVVIIIISIFNVEFYAVVPSIPCSRLALIGKIIHPQQLMHSFIHAAMGMVMAWCAAVITQGQYSFLVVPCTGT
NSFDSPAAQTCLNEYHLFFLLTGAFMGYSYSLLYFVNNMNYLPFPIIQQYKFLRFRRSLLLLVKHSCVESLFLVR
NFCILYYFLGYIPKAWISTAMNLHIDEQVHRPLDTVSGLLNLSLLYHVWLCGVFLLTTWYVSWILFKIYATEAHV
FPVQPPFAEGSDECLPKVLNSNPPPIIKYLALQDLMLLSQYSPSRRQEVFSLSQPGGHPHNWTAISRECLNLLNG
MTQKLILYQEAAATNGRVSSSYPVEPKKLNSPEETAFQTPKSSQMPRPSVPPLVKTSLFSSKLSTPDVVSPFGTP
FGSSVMNRMAGIFDVNTCYGSPQSPQLIRRGPRLWTSASDQQMTEFSNPSPSTSISAEGKTMRQPSVIYSWIQNK
REQIKNFLSKRVLIMYFFSKHPEASIQAVFSDAQMHIWALEGLSHLVAASFTEDRFGVVQTTLPAILNTLLTLQE
AVDKYFKLPHASSKPPRISGSLVDTSYKTLRFAFRASLKTAIYRITTTFGEHLNAVQASAEHQKRLQQFLEFKE

1325/2682 FIGURE 1195

1326/2682 FIGURE 1196

 ${\tt MSPSGRLCLLTIVGLILPTRGQTLKDTTSSSSADSTIMDIQVPTRAPDAVYTELQPTSPTP.TWPADETPQPQTQTQQLEGTDGPLVTDPETHKSTKAAHPTDDTTTLSERPSPSTDVQTDPQTLKPSGFHEDDPFFYDEHTLRKRGLLVAAVLFITGIIILTSGKCRQLSRLCRNRCR$

1327/2682 FIGURE 1197

TGGCGGCGGCGGCGGTTGTCCCGGCTGTGCCGGTTGGTGTGCCCGTCAGCCCGCGTACCACAGCGCCCCGGG GCCGCGGCCAGGGCGCCCGTGGGACCGCGGGCCCCCGGCGCAGCGCTGCCGGCCCTGCCGGCCTCC ATGACAACATTCACACAACAGGAAATTGAATTCTTACAAAAACATGGAAATGAAGTCTGTAAACAGATTTGGCTA GGATTATTTGATGATAGATCTTCAGCAATTCCAGACTTCAGGGATCCACAAAAAGTGAAAGAGTTTCTACAAGAA AAGTATGAAAAGAAAGATGGTATGTCCCGCCAGAACAAGCCAAAGTCGTGGCATCAGTTCATGCATCTATTTCA GGGTCCTCTGCCAGTAGCACAAGCAGCACCTGAGGTCAAACCACTGAAATCTCTTTTAGGGGGATTCTGCACCA ACACTGCACTTAAATAAGGGCACACCTAGTCAGTCCCCAGTTGTAGGTCGTTCTCAAGGGCAGCAGCAGGAGAAG AAGCAATTTGACCTTTTAAGTGATCTCGGCTCAGACATCTTTGCTGCTCCAGCTCCTCAGTCAACAGCTACAGCC AATTTTGCTAACTTTGCACATTTCAACAGTCATGCAGCTCAGAATTCTGCAAATGCAGATTTTGCAAACTTTGAT GCATTTGGACAGTCTAGTGGTTCGAGTAATTTTGGAGGTTTCCCCACAGCAAGTCACTCTCCTTTTCAGCCCCAA ACTACAGGTGGAAGTGCTGCATCAGTAAATGCTAATTTTGCTCATTTTGATAACTTCCCCAAATCCTCCAGTGCT GATTTTGGAACCTTCAATACTTCCCAGAGTCATCAAACAGCATCAGCTGTTAGTAAAGTTTCAACGAACAAAGCT GGTTTACAGACTGCAGACAAATATGCAGCACTTGCTAATTTAGACAATATCTTCAGTGCCGGGCAAGGTGGTGAT TCTTCAGACAAGTATGCAGCTCTGGCAGAACTAGACAGCGTTTTCAGTTCTGCAGCCACCTCCAGTAATGCGTAT ACTTCCACAAGTAATGCTAGCAGCAATGTTTTTGGAACAGTGCCAGTGGTTGCTTCTGCACAGACACAGCCTGCT TCATCAAGTGTGCCTGCTCCATTTGGACGTACGCCTTCCACAAATCCATTTGTTGCTGCTGCTGGTCCTTCTGTG GCATCTTCTACAAACCCATTTCAGACCAATGCCAGAGGAGCAACAGCGGGCAACCTTTGGCACTGCATCCATGAGC ATGCCCACGGGATTCGGCACTCCTGCTCCCTACAGTCTTCCCACCAGCTTTAGTGGCAGCTTTCAGCAGCCTGCC TTTCCAGCCCAAGCAGCTTTCCCTCAACAGACAGCTTTTTCTCAACAGCCCAATGGTGCAGGTTTTGCAGCATTT GGACAAACAAAGCCAGTAGTAACCCCTTTTGGTCAAGTTGCAGCTGCTGGAGTATCTAGTAATCCTTTTATGACT GGTGCACCAACAGGACAATTTCCAACAGGAAGCTCATCAACCAATCCTTTCTTA**TAG**CCTTATATAGACAATTTA CTGGAACGAACTTTTATGTGGTCACATTACATCTCTCCACCTCTTGCACTGTTGTCTTGTTTCACTGATCTTAGC TTTAAACACAAGAGAAGTCTTTAAAAAGCCTGCATTGTGTATTAAACACCAGGTAATATGTGCAAAACCGAGGGC TCCAGTAACACCTTCTAACCTGTGAATTGGCAGAAAAGGGTAGCGGTATCATGTATATTAAAATTGGCTAATATT AAGTTATTGCAGATACCACATTCATTATGCTGCAGTACTGTACATATTTTTCTTAGAAATTAGCTATTTGTGCAT ATCAGTATTTGTAACTTTAACACATTGTTATGTGAGAAATGTTACTGGGGAAATAGATCAGCCACTTTTAAGGTG CTGTCATATATCTTGGAATGAATGACCTAAAATCATTTTAACCATTGCTACTGGAAAGTAACAGAGTCAAAATTG GAAGGTTTTATTCATTCTTGAATTTTTCCTTTCTAAAGAGCTCTTCTATTTATACATGCCTAAATTCTTTTAAAA TATAAAATAAAAAAAAAAAAAAAGAAAAAAAAAA

1328/2682 FIGURE 1198

MAASAKRKQEEKHLKMLRDMTGLPRNRKCFDCDQRGPTYVNMTVGSFVCTSCSGSLRGLNPPHRVKSISMTTFTQ
QEIEFLQKHGNEVCKQIWLGLFDDRSSAIPDFRDPQKVKEFLQEKYEKKRWYVPPEQAKVVASVHASISGSSASS
TSSTPEVKPLKSLLGDSAPTLHLNKGTPSQSPVVGRSQGQQQEKKQFDLLSDLGSDIFAAPAPQSTATANFANFA
HFNSHAAQNSANADFANFDAFGQSSGSSNFGGFPTASHSPFQPQTTGGSAASVNANFAHFDNFPKSSSADFGTFN
TSQSHQTASAVSKVSTNKAGLQTADKYAALANLDNIFSAGQGGDQGSGFGTTGKAPVGSVVSVPSQSSASSDKYA
ALAELDSVFSSAATSSNAYTSTSNASSNVFGTVPVVASAQTQPASSSVPAPFGRTPSTNPFVAAAGPSVASSTNP
FQTNARGATAATFGTASMSMPTGFGTPAPYSLPTSFSGSFQQPAFPAQAAFPQQTAFSQQPNGAGFAAFGQTKPV
VTPFGQVAAAGVSSNPFMTGAPTGQFPTGSSSTNPFL

1329/2682 FIGURE 1199

TGTGAGGTCGCGTTCCCCAGTGTTACGGAGGGTCCTTGAGGCAGGAGTGAAAATTGGGTCTGGGGGTTAGTCCTG GGGTGGAGGTCTGGGCACGCCGGGTCGGACCCCCTCCATCTTCGGTTTTGCACACCCCGCTTTCCAGCGCGGAGT CGGGCGGGGGTAGGGCGCGTCGCGTGCGTGACGTCATCCAGCGGCGCCATCGGAGGCTCCAGTGGCCTTGACCT $\texttt{CCCGCGTCGTGTAGGCCTGCGCGGCG} \underline{\textbf{ATC}} \texttt{CTGCAGTTCGTCCGGGCCGGGGCGCGGGCCTGGCTTCGGCCTACCG}$ GTCTCCCGGAGCCCGTGCTGCGCAAAGTCGAGCTCCCGGTACCCACTCATCGACGCCCAGTGCAGGCCTGGGTCG AGTCCTTGCGGGGCTTCGAGCAGGAGCGCGTGGGCCTGGCCGACCTGCACCCGATGTTTTCGCCACCGCGCCCA GGCTGGACATACTGCACCAGGTTGCTATGTGGCAGAAGAACTTCAAGAGAATTAGCTATGCCAAGACCAAGACGA GAGCCGAGGTGCGGGGCGGGAAAGCCTTTGGCCGCAGAAAGGCACTGGGCGGCCCGGCATGGCAGCATC CGCTCTCCGCTCTGGCGAGGAGGAGGTGTTGCCCATGGCCCCCGGGGCCCACAAGTTACTACATGCTGCCCA TGAAGGTGCGGGCGCTGGGTCTCAAAGTGGCACTGACCGTCAAGCTGGCCCAGGACGACCTGCACATCATGGACT CCCTAGAGCTGCCCACCGGAGACCCACAGTACCTGACAGAGCTGGCGCACTACCGCCGCTGGGGGGACTCCGTAC TCCTCGTGGACTTAACACACGAGGAGATGCCACAGAGCATCGTGGAGGCCACCTCTAGGCTTAAGACCTTCAACT TGATCCCGGCTGTTGGCCTAAATGTGCACAGCATGCTCAAGCACCAGACGCTGGTCCTGACGCTGCCCACCGTCG CCTTCCTGGAGGACAAGCTGCTCTGGCAGGACTCACGTTACAGACCCCTCTACCCCTTCAGCCTGCCCTACAGCG ACTTCCCCCGACCCCTACCCCACGCTACCCÁGGGCCCAGCGGCCACCCCGTACCACTGT<u>TGA</u>TGTGAAGCACCTC TTCTGAGCCAGGCCGAGCCCTGGACGACTTGGGAGCCTCAGGCCCACGCCCACCCTTCGAGGAAGGTGTCACCT GGCCCCCTTCATTCCACGGAGGAAGCTGAGGCCACAGGGAGCGGCCATCGCCATTGGGAAGGGGCGACTCCACGG

1330/2682 FIGURE 1200

MLQFVRAGARAWLRPTGSQGLSSLAEEAARATENPEQVASEGLPEPVLRKVELPVPTHRRPVQAWVESLRGFEQE RVGLADLHPDVFATAPRLDILHQVAMWQKNFKRISYAKTKTRAEVRGGGGKPLAAERHWAGPAWQHPLSALARRR CCPWPPGPTSYYYMLPMKVRALGLKVALTVKLAQDDLHIMDSLELPTGDPQYLTELAHYRRWGDSVLLVDLTHEE MPQSIVEATSRLKTFNLIPAVGLNVHSMLKHQTLVLTLPTVAFLEDKLLWQDSRYRPLYPFSLPYSDFPRPLPHA TQGPAATPYHC

1331/2682 FIGURE 1201

TTTTTTTTTTTTTTGGAGTTATACCTTTGGTTCTGTTTTTACCCTTTATTTGGAATACAGTGCAACATTACAGT TTTGGATCATTAAATGAATGGACTTGGTGATATAGTACTAACAAGCACGACCTGAATTCTGGGAGTAAGTGGTTT TCTAGTTCATGGGGGAGGAAAACAGATACGTGCAAGATCTCCAGAGGAGAACAGAACCATGGTACTCAGTGAGTC ACCAAAGGGCTTTGGCTTCAACTCACTAATGGCTGGAACAAGTGCCAGTCTTGGTCAGCCATCCAGGATTTTCAT AAAAGGATCTAGATGACTACTGAAGTGTCCTCCATTCATGAGTTGGCAAAATCTTCAGAGTGACTGTTGGAGCAA GGAGCCTTTCATGTGCTCCCAGTTATTATATAGTGCATAGAGGCTGGTAAGTGTTAGTCCTGTCAGACCACCTCG TGCTATCCCTCGAAGACCACCTTTGGACTCTGGATGGGTCCTCCAAATATTAACCTTGAAGATTAGTGACGGCCA ACCTAGGCAACACGGCAAAACCCTGTCTCTGCAAAAAATAGAAAAATTAGCTTAGTGGGGTGGCATGCGCCTGTG GTCCCAGCTATTTGGGAGGCTGAGGTAGGAGGATCGCTTGAGCCCAGGAGGTCGAGGCTGCAGTGAGCTGAGATT TTGAGTTAGATGCTGGTGACCACCCCCCACTTCATGCACTGACGCATCAATCTCCCACAATTAAAAAAACAGTGAG TGACACCTAGCATCATGCTAGTTGAAAAGAACTCAAGAATTACAGATATTGAACTACCTGCTTGATAACAAGTGA ACAATTTTACATGTGGCAAAAGATTAGCAACAAGGATTTCACTTGCAATGGAGAAACAAAAATATTTCAATCGGT TACTTAAAAATAGTCCCCAAGTGTAAATAAAAGGAAGCTACAGATAAATTCTCAAAATAAAAAGGCCTAACTGC TTATGGTTATAAAATGTTAGTCTTACAAACGTAATGTGGCAAAGAGAAACCAAGCTACAAAACTCCTCAGGAATG GGGGTGCCCAAAGCAGCTTTTTAAAAAATGTGAAGTCCTCAAGCAGCTCCATGAGTAGGGATCATAAACTTCAGG TAGCCATCTTTGTACCTAGAGTGTATTTGTTCCAAGTCATGTGTTAGGGAGACAGAGGTAGAGCGGAGTTGTGGG GGTGGCTAGAGGCCCTTTTAGCTCCGTGCCTGTCAATTCTGTGACATTCAGTGATGTTGCTGAGCTACAACATTT CAGAACTAACCATTTCTGCAACGAGCGTCCTACCAGATGGCTTCAGCTGATGGATTAAAGGGCCACTCCCCCTCC AGGAATCTCTCCAGTCTGAAGACTTCTGATAGCTGACCTGCTTACGTTCTTAGTTTTCCAATGCTAAGTGTC ATAATTATCTCTCTCAAACAGAAACTGCAGACATTATCTATAAACAG

1332/2682 FIGURE 1202

 ${\tt MVLSESPKGFGFNSLMAGTSASLGQPSRIFITANQNLQFFKLIVGRRERITPNCLIKGSR}$

1333/2682 FIGURE 1203

CTCAGTATTGCATCTCCTTTGCTGATGTTGAAAAAGCTCATATCAACATTCGAGATTCTATCCACCTCACACCAG TGCTAACAAGCTCCATTTTGAATCAACTAACAGGGCGCAATCTTTTCTTCAAATGTGAACTCTTCCAGAAAACAG GATCTTTTAAGATTCGTGGTGCTCTCAATGCCGTCAGAAGCTTGGTTCCTGATGCTTTAGAAAGGAAGCCGAAAG ATATTGTGGTGCCCCAGACAGCTCCAGACTGTAAAAAACTTGCAATACAAGCCTACGGAGCGTCAATTGTATACT GTGAACCTAGTGATGAGTCCAGAGAAAATGTTGCAAAAAGAGTTACAGAAGAAACAGAAGGCATCATGGTACATC CCAACCAGGAGCCTGCAGTGATAGCTGGACAAGGGACAATTGCCCTGGAAGTGCTGAACCAGGTTCCTTTGGTGG GTGTGAAGGTATATGCTGCTGAACCCTCAAATGCAGATGACTGCTACCAGTCCAAGCTGAAGGGGAAACTGATGC CCAATCTTTATCCTCCAGAAACCATAGCAGATGGTGTCAAATCCAGCATTGGCTTGAACACCTGGCCTATTATCA GGGACCTTGTGGATGATATCTTCACTGTCACAGAGGATGAAATTAAGTGTGCAACCCAGCTGGTGTGGGAGAGGA TGAAACTACTCATTGAACCTACAGCTGGTGTTGGAGTGGCTGCTGTGTGTCTCAACATTTTCAAACTGTTTCCC CAGAAGTAAAGAACATTTGTATTGTGCTCAGTGGTGGAAATGTAGACTTAACCTCCTCCATAACTTGGGTGAAGC AGGCTGAAAGGCCAGCTTCTTATCAGTCTGTTTCTGTT<u>TAA</u>TTTACAGAAAAGGAAATGGTGGGAATTCAGTGTC TTTAGATACTGAAGACATTTTGTTTCCTAGTATTGTCAACTCTTAGTTATCAGATTCTTAATGGAGAGTGGCTAT TTCATTAAGATTTAATAGTTTTTTTTGGACTAAGTAGTGGAAAAACTTTTATACTTAACTGAGACATTTTGTCAA GGCTAAAAAAAAGTCTTGCAAAATGGGGCAGTGGACTGACAGGCTGACATAGAAAATAAACTTTGCCCAATCACA ACTTGTGCCTCCCATCCCTGGAGTACTGACTGGCACCGGTAAGACAGAATCTCTCTGAATCCATTACTCCATGCC CCCTTGAGGCACTGTTGAAGAAATCTCACTTTTCAGCCAGGGTACTGGTTCTGGTACATATGGATCATAAGTCCA TTTGGGGAAGACTCGTTTATACAGGTTCATCAGTACTGTGTCTTGAGATTTTAGCTTCCCATCAAAGCTGCATTT CATGTGGCCATGGGTACCTAGAAAGACATCAGAACAAGTCGGTCAAATTAAAAGTAGAAAATTTTAAAGCAATGA CTTCCAACCCAACAGTCATTTAGCAACACTGCAGAAATGCAGACATGGTCTCAAATCCCGTGTTTCCTTACCTAA AGGTTCCTTGATATGTCCTCTCCGGCCCCACTTCGTTCTCAGTTCCACTGGTTTAAACCACAGCACATCCTCTTA GAATCAAACACATTAAAGACCAAGATGAAACATTTACCCACAAAATGTAAACCCAACCTTTATACCACAAAGGCA ATCAGATCCCATCCTCCTTCATACCCACCTCTGTTGAAGAACATGTAACGTACTACTGCCATCTTAGTAAAA GTAGCAATGAGGCTGTGCATTCCTAAAGGACAAAAGCAAAGAAGCTATTTAGGAATTTACAGGCCAAAGTCTTCA TTTATTGCCCAGTCCATTTAAAGACCCATGCAAGAGCCTGGTTTGTCATCCCTGCCCTAGCCCAATCTGAGGCTA AGATTGGTAAACTGTAAGCCCACACTTAACCTTGTCAATAGGTTCTTGAAAACTTGTACTTCAAGAGAAATGATG TATAACAAAACCATACTTTTTCTCATCAGTTGTTACAAGGAAAGGATGTTGAACAAAAGGCAGTTATTTGAGGAC TGGCTATACACTGTTTCACGTAAAAGTTGGAGTTTTCATTGTTCTATTAACAATGTTAAATGAAGACTTACTGTA CT

1334/2682 FIGURE 1204

MCAQYCISFADVEKAHINIRDSIHLTPVLTSSILNQLTGRNLFFKCELFQKTGSFKIRGALNAVRSLVPDALERK PKAVVTHSSGNHGQALTYAAKLEGIPAYIVVPQTAPDCKKLAIQAYGASIVYCEPSDESRENVAKRVTEETEGIM VHPNQEPAVIAGQGTIALEVLNQVPLVDALVVPVGGGGMLAGIAITVKALKPSVKVYAAEPSNADDCYQSKLKGK LMPNLYPPETIADGVKSSIGLNTWPIIRDLVDDIFTVTEDEIKCATQLVWERMKLLIEPTAGVGVAAVLSQHFQT VSPEVKNICIVLSGGNVDLTSSITWVKQAERPASYQSVSV

1335/2682 FIGURE 1205

GCGAGTGCGAATGCGAGGGGGGGCCTTGAGTGAAACCGGAGCTACAAAGAAGGGGAGAGTCCGGGAGCGGGA GGGCGCGAGGGAGGAGCGGCGGCTCCGGGGCAGCTCCGACGCCCTCCCGCGGGGAAGGAGCCCCCGCGGTGCCGC $\tt CGAGGCCCGACGCGGGGCCGCCCCTCGGCTCGCCCCCCGCGCCCGCGCCCGCGGGAATGATGAAGAAGAACA$ ATTCCGCCAAGCGGGGACCTCAGGATGGAAACCAGCAGCCTGCACCGCCCGAGAAGGTCGGCTGGGTCCGGAAAT TCTGCGGGAAAGGGATTTTCAGGGAGATTTGGAAAAACCGCTATGTGGTGCTGAAAGGGGACCAGCTCTACATCT CTGAGAAGGAGGTAAAAGATGAGAAAAATATTCAAGAGGTATTTGACCTGAGTGACTATGAGAAGTGTGAAGAGC TCCGGAAGTCCAAGAGCAGGAGCAAGAAAAATCATAGCAAGTTTACTCTTGCCCACTCCAAACAGCCCGGTAACA CGGCACCCAACCTGATCTTCCTGGCAGTGAGTCCAGAAGAAGGAATCGTGGATCAATGCCCTCAACTCTGCCA TCACCCGAGCCAAGAACCGTATCTTGGATGAGGTCACCGTTGAGGAGGACAGCTATCTTGCCCATCCCACTCGAG ACAGGGCAAAAATCCAGCACTCCCGCCGCCCCCAACAAGGGGACACCTAATGGCTGTGGCTTCCACCTCTACCT GCTTTCGGGTTGACCTGGACAAGTCTGTGGCCCAGCTGGCAGGGAGCCGGCGGAGAGCGGACTCAGACCGCATCC AGCCCTCCGCAGACCGGGCAAGCAGTCTCTCCCGACCTTGGGAAAAAACAGACAAAGGGGCCCACCTACACCCCCC AGGCACCCAAGAAGTTGACGCCCACAGAGAAAGGCCGCTGCGCCTCCCTGGAGGAGATCCTATCTCAGCGGGATG CTGCCTCTGCCCGCACCCTCCAGCTGCGGGCTGAGGAACCCCCAACCCCTGCCCTCCCCAACCCGGGGCAGCTGT CCCGGATCCAGGACCTGGTAGCAAGGAAACTGGAGGAGACTCAGGAGCTTCTGGCAGAGGTTCAGGGACTGGGAG ATGGGAAGCGAAAGGCCAAGGACCCCCCTCGGTCTCCGCCGGATTCTGAGTCAGAGCAGCTGCTGCTGGAGACGG AACGGCTGCTGGGAGAGGCATCATCGAATTGGAGCCAGGCAAAGAGGGTGCTGCAGGAGGTCAGGGAGCTGAGAG

1336/2682 FIGURE 1206

MMKKNNSAKRGPQDGNQQPAPPEKVGWVRKFCGKGIFREIWKNRYVVLKGDQLYISEKEVKDEKNIQEVFDLSDY EKCEELRKSKSRSKKNHSKFTLAHSKQPGNTAPNLIFLAVSPEEKESWINALNSAITRAKNRILDEVTVEEDSYL AHPTRDRAKIQHSRRPPTRGHLMAVASTSTSDGMLTLDLIQEEDPSPEEPTSCAESFRVDLDKSVAQLAGSRRRA DSDRIQPSADRASSLSRPWEKTDKGATYTPQAPKKLTPTEKGRCASLEEILSQRDAASARTLQLRAEEPPTPALP NPGQLSRIQDLVARKLEETQELLAEVQGLGDGKRKAKDPPRSPPDSESEQLLLETERLLGEASSNWSQAKRVLQE VRELRDLYRQMDLQTPDSHLRQTTPHSQYRKSLM

1337/2682 FIGURE 1207

 ${\tt CCCGCGTGCATACGGTTGCCGGC}$ TCATAGACCTCACGTTGTCGAAGACTCAACGAAAGACTCCAACCGTTATTCATAAACATTACCAAATACATCGCA TTAGACATTTTTACATGAGAAAAGTCAAATTTACTCAACAGAATTACCATGATAGACTTTCACAAATTCTAACAG ATTTCCCCAAATTGGATGATATTCATCCGTTCTATGCTGATTTGATGAATATTCTCTACGACAAGGATCATTACA AGTTGGCTCTGGGGCAAATAAATATTGCCAAAAATTTAGTGGACAATGTTGCTAAAGATTATGTGCGACTGATGA AGTATGGCGACTCTCTCTACCGCTGCAAACAGCTGAAGCGTGCGGCCCTGGGACGGATGTGCACAGTGATCAAGA GGCAGAAGCAGAGTTTGGAGTATTTGGAGCAAGTGCGTCAGCATTTATCCCGTTTGCCAACCATTGATCCGAATA CCAGGACCCTGCTTTTGTGTGGGTACCCAAATGTTGGGAAGTCCAGCTTCATCAACAAGGTGACGAGAGCAGACG AGGTTGTAGACACTCCTGGGATCCTGGACCACCCTCTGGAGGATAGGAACACCATCGAGATGCAGGCCATCACTG CCCTGGCCCACCTCCGTGCTGCGGTCCTGTATGTGATGGATTTGTCTGAGCAGTGTGGGCATGGGCTGAGGGAGC AGCTAGAACTCTTCCAGAACATCAGACCTCTCTTCATCAACAAGCCTCTCATAGTTGTAGCCAACAAATGTGATG TGAAGAGAATAGCTGAACTTTCTGAAGATGATCAGAAAATATTTACAGATTTGCAGTCTGAAGGATTCCCTGTAA TAGAGACCAGCACCCTGACTGAGGAAGGTGTTATTAAAGTTAAAACAGAGGCTTGCGATAGGCTTTTGGCTCATC GAGTGGAAACCAAAATGAAGGGAAATAAAGTGAATGAGGTGCTGAATAGACTGCACCTGGCTATCCCAACCAGGA GGGACGATAAGGAGAGCCCCCTTTCATCCCTGAAGGAGTGGTGGCTCGCAGGAAGAGGATGGAAACTGAGGAGT CCAGGAAGAAGAGGGAACGAGATCTTGAGCTGGAAATGGGAGATGATTATATTTTGGATCTTCAGAAGTACTGGG ATTTAATGAATTTGTCTGAAAAACATGATAAGATACCAGAAATCTGGGAAGGCCATAATATAGCTGATTATATTG ATCCAGCCATCATGAAGAAATTGGAAGAATTAGAAAAAGAAGAGAGCTGAGAACAGCTGCTGGAGAGTATGACA GTGTATCTGAGAGTGAAGACGAAGAGATGCTGGAAATCCGACAGCTGGCAAAGCAAATTCGAGAGAAAAAGAAGT TGAAAATTCTGGAGTCCAAAGAAAAGAATACACAGGGACCCAGGATGCCGCGAACTGCTAAGAAGGTTCAGAGGA CAGTTTTGGAGAAGGAGATGCGTAGTCTTGGTGTTGACATGGACGATAAAGACGATGCCCATTACGCAGTCCAGG CAAGAAGATCCCGGAGCATCACTAGGAAAAGAAAGCGGGAAGACTCTGCTCCCCCGTCCTCTGTGGCCCGGAGTG GGAGTTGCTCTCGAACTCCACGTGACGTTTCTGGTCTTAGGGATGTCAAGATGGTGAAGAAAGCCAAGACTATGA AGAATGCTCAGAAGAAGATGAATCGGTTGGGGAAGAAAGGGGGAGGCGGATAGACACGTGTTTGATATGAAGCCCA AGCACTTGCTGTCTGGGAAGAGGAAAGCTGGTAAAAAGGACAGGAGA<mark>TAG</mark>TATCCGTTTGGTTGGCGTGGCTTCG CTAGAGTGTTGCTGTTTATTTCCTGGTTTGGTACAGTATGGTTTCATGAAATTGGAGCTCTGTACAAACTGAAAA AGACAAAATAAGTAAAGCACTTGTTGCTTTGCTGAAAACTATGGTTAACCCTATATAGGTGTGGGAAATTTTTGT CACTGCATAATATTACAAATATTTTGAGTAGACAGTGTTTCCACATTTAATGGAGTATCAGTTGCTTCAGATTTT CAGAACTGGGAAGATTTACTGGTGTAACTGGGTTGTTTTTGATGGAGAAAAACCTTATTTTCTTTTGTAAGAGCT GGGAGCAAACACGTTTATGAGTGTGTCGGAATCCCGTGCTTAAAATACGCTCTTAAATTATTTTCTAGTCTTATT AAAAAAAAAAA

1338/2682 FIGURE 1208

MAHYNFKKITVVPSAKDFIDLTLSKTQRKTPTVIHKHYQIHRIRHFYMRKVKFTQQNYHDRLSQILTDFPKLDDI HPFYADLMNILYDKDHYKLALGQINIAKNLVDNVAKDYVRLMKYGDSLYRCKQLKRAALGRMCTVIKRQKQSLEY LEQVRQHLSRLPTIDPNTRTLLLCGYPNVGKSSFINKVTRADVDVQPYAFTTKSLFVGHMDYKYLRWQVVDTPGI LDHPLEDRNTIEMQAITALAHLRAAVLYVMDLSEQCGHGLREQLELFQNIRPLFINKPLIVVANKCDVKRIAELS EDDQKIFTDLQSEGFPVIETSTLTEEGVIKVKTEACDRLLAHRVETKMKGNKVNEVLNRLHLAIPTRRDDKERPP FIPEGVVARRKRMETEESRKKRERDLELEMGDDYILDLQKYWDLMNLSEKHDKIPEIWEGHNIADYIDPAIMKKL EELEKEEELRTAAGEYDSVSESEDEEMLEIRQLAKQIREKKKLKILESKEKNTQGPRMPRTAKKVQRTVLEKEMR SLGVDMDDKDDAHYAVQARRSRSITRKRKREDSAPPSSVARSGSCSRTPRDVSGLRDVKMVKKAKTMKNAQKKMN RLGKKGEADRHVFDMKPKHLLSGKRKAGKKDRR

1339/2682 FIGURE 1209

GGCTGCGAGAAGACGACAGAAGGGGGAAGGGGCTGATGCGAACTGGGGCCACGGTAGCCATCGCGCTTTGCAGTT CGGTCTCCTGGTGTACGGCCAACGCCAAGTAGGGGATTGCGTTCCCTCCAGTCGCAGACCCTATCAGATTTGGAT ATCTCCTTCATATTTGATTGGATTTACAGTGGTTTCAGCAGTGTGCTACAGTTTTTAGGATTATAAAGAAAACT GGTAAACTGGTATTTCTTGGATTGGATAATGCAGGAAAAACAACATTGCTACACATGCTAAAAGATGACAGACTT GGACAACATGTCCCAACATTACATCCCACTTCCGAAGAACTGACCATTGCTGGCATGACGTTTACAACTTTTGAT CTGGGTGGACATGTTCAAGCTCGAAGAGTGTGGAAAAACTACCTTCCTGCTATCAATGGCATTGTATTTCTGGTG GATTGTGCAGACCACGAAAGGCTGTTAGAGTCAAAAGAAGAACTTGATTCACTAATGACAGATGAAACCATTGCT AATGTGCCTATACTGATTCTTGGGAATAAGATCGACAGACCTGAAGCCATCAGTGAAGAGAGGTTGCGAGAGATG TTTGGTTTATATGGTCAGACAACAGGAAAGGGGAGTATATCTCTGAAAGAACTGAATGCCCGACCCTTAGAAGTT $\tt TTCATGTGTAGTGTGCTCAAAAGACAAGGTTACGGAGAAGGCTTCCGCTGGATGGCACAGTACATTGAT \underline{TAA} CAC$ AAACTCACATTGGTTCCAGGTCTCAACGTTCAGGCTTACTCAGAGATTTGATTGCTCAACATGCATAACTTGAAT TCAATAGACTTTTGCTGGTTATAAAACAGATGTTTTTTAGATTATTAATATTAAATCAACTTAATTTGAATGAGA AGTTTATAATCTGACATCACCCCAGCGCCATTTGTAAAGAGCAACTTTCCAGCAGTACATTTGAAGCACTTTTTA ACAACATGAAACTATAAAACCATATTTAAAAGCTCATCATGTTAAATTTTTTATGTACTTTTCTGGAACTAGTTTT TAAATTTTAGATTATATGTCCACCTATCTTAAGTGTACAGTTAATAATTAGCTTATTCAATGATTGCATGATGCC AAAAA

1340/2682 FIGURE 1210

MSFIFDWIYSGFSSVLQFLGLYKKTGKLVFLGLDNAGKTTLLHMLKDDRLGQHVPTLHPTSEELTIAGMTFTTFD LGGHVQARRVWKNYLPAINGIVFLVDCADHERLLESKEELDSLMTDETIANVPILILGNKIDRPEAISEERLREM FGLYGQTTGKGSISLKELNARPLEVFMCSVLKRQGYGEGFRWMAQYID

1341/2682 FIGURE 1211

CACGGGGCTGCGTGGAAAGAGCGCCGAGCGGTGGCGTCGTTGTCGCCCCCTCCTCGTCGGGAAGAATCGTTTGGT $\tt CTCCTGCCGTGCCGGGCGGTGCTGCTGCTGCTGCCGCGGGGTTGTGGATG$ GTGATGACAGGAGAATGTGTGTGTGTCCCGGGCCCAGACGAATTGGAATCCCAGTCAGAAGTTCCAGCCTGCCAC TGTTCTCTGATGCCATGCCAGCACCCAACTCAACTGTTTTTTCCTCTCATCCGTAACTGTGAACTGAGCAGGATCT ATGGCACTGCATGTTACTGCCACCACAAACATCTCTGTTGTTCCTCATCGTACATTCCTCAGAGTCGACTGAGAT ATGCTTCCACACCACAGAAATTTTACCTCACACCTCCACAAGTCAATAGCATCCTTAAAGCTAATGAATACAGTT CACCCATTGAGGACCGGAGAAGTGCAGCCAGCCTGCTTGCAGACCAGAGGGATGCTTTTGGGGGGTTTTTGATGGCC ATGCAGGTTGTGCTTGGTCCCAGGCAGTCAGTGAAAGACTCTTTTATTATATTGCTGGCTCTTTGGTACCCCATG AGACTTTGCTAGAGATTGAAAATGCAGTGGAGAGCGGCCGGGCACTGCTACCCATTCTCCAGTGGCACAAGCACC CCAATGATTACTTTAGTAAGGAGGCATCCAAATTGTACTTTAACAGCTTGAGGACTTACTGGCAAGAGCTTATAG ACATCTCCTTGGAGGCGCAAGTTGGTGATCCTAATTCTTTTCTCAACTACCTGGTGCTTCGAGTGGCATTTTCTG GAGCCACTGCTTGTGTGGCCCATGTGGATGGTGTTGACCTTCATGTGGCCAATACTGGCGATAGCAGAGCCATGC TGGGTGTGCAGGAAGAGGACGGCTCATGGTCAGCAGTCACGCTGTCTAATGACCACAATGCTCAAAATGAAAAGAG AACTAGAACGGCTGAAATTGGAACATCCAAAGAGTGAGGCCAAGAGTGTCGTGAAACAGGATCGGCTGCTTGGCT TGCTGATGCCATTTAGGGCATTTGGAGATGTAAAGTTCAAATGGAGCATTGACCTTCAAAAGAGAGTGATAGAAT CTGGCCCAGACCAGTTGAATGACAATGAATATACCAAGTTTATTCCTCCTAATTATCACACACCTCCTTATCTCA $\tt CTGCTGAGCCAGAGGTAACTTACCACCGATTAAGGCCACAGGATAAGTTTCTGGTGTTGGCTACTGATGGGTTGT$ TAGCTGTTGGTGGCTACAAGGTGACTCTGGGACAGATGCATGGCCTTTTAACAGAAAGGAGAACCAAAATGTCCT CGGTATTTGAGGATCAGAACGCAGCAACCCATCTCATTCGCCACGCTGTGGGCAACAACGAGTTTGGGACTGTTG ATCATGAGCGCCTCTCTAAAATGCTTAGTCTTCCTGAAGAGCTTGCTCGAATGTACAGAGATGACATTACAATCA TTGTAGTTCAGTTCAATTCTCATGTTGTAGGGGCGTATCAAAACCAAGAAAAG<u>TGA</u>GTGGCTCTTTACTGGCAAT TCTCAAATGATTACATTTAAAGGGCAGATTTTTTAAAAGATCTACTATAATAAACATTTTCAGGTGGCATTCTAA GCATTTACCCTTTTGATACTCTAGGGGCGCTCCAAATTGACTTTGCAGCAGGGTGGCAGGGCAGAAGAGTCTGGT CCTGCCTAGCTCAGATTTCATGGCACCTGCACTTGAGGCAAGCACTTCTTTATCACAGGTGTCTTGAAACATTAG CTTCTTTTACCAACCTGAGAAAATTAGGATGACCTGGCAAATAAGATCTTGAATAGCCAAAAGCAAGTATCTTGC TGTGTGTAGTCTCTTGGTTAAAGTGAAGAACAGTACTGTTCACACCTTTCTTCACTGAGATTCCAGTGACATGAG GTTTTCAAATCCAGTTCTTCAAGCCATAAATGACCAAGATCCAAGCAATCTGAATTTGTTTTTTTGTGATTATTTGA CTGGAATGCTTCTTAAGTGGAATAACTATACTCCGTTATCCACCCGATTTCCTAATGTAATTGAAACATTTTCTA AAAAA

1342/2682 FIGURE 1212

MLSAPCCDDRRMCVCPGPRRIGIPVRSSSLPLFSDAMPAPTQLFFPLIRNCELSRIYGTACYCHHKHLCCSSSYI PQSRLRYTPHPAYATFCRPKENWWQYTQGRRYASTPQKFYLTPPQVNSILKANEYSFKVPEFDGKMSVLSLDLTA IKLPANAPIEDRRSAATCLQTRGMLLGVFDGHAGCAWSQAVSERLFYYIAGSLVPHETLLEIENAVESGRALLPI LQWHKHPNDYFSKEASKLYFNSLRTYWQELIDLNTGESTDIDVKEALINAFKRLDNDISLEAQVGDPNSFLNYLV LRVAFSGATACVAHVDGVDLHVANTGDSRAMLGVQEEDGSWSAVTLSNDHNAQNERELERLKLEHPKSEAKSVVK QDRLLGLLMPFRAFGDVKFKWSIDLQKRVIESGPDQLNDNEYTKFIPPNYHTPPYLTAEPEVTYHRLRPQDKFLV LATDGLWETMHRQDVVRIVGEYLTGMHHQQPIAVGGYKVTLGQMHGLLTERRTKMSSVFEDQNAATHLIRHAVGN NEFGTVDHERLSKMLSLPEELARMYRDDITIIVVQFNSHVVGAYQNQEK

1343/2682 FIGURE 1213

CCATGGAGTCAGCCGGGCTAGAGCAGCTCCTACGGGAGCTGCTGCTACCGGACACCGAGCGCATCCGTCGGGCCA CGGAACAGCTCCAGATCGTTCTTCGGGCCCCCGCCGCTTTGCCGGCTCTCTGCGACCTGCTAGCCTCGGCGGCCG ACCCCAGATCCGCCAGTTTGCGGCCGTGCTGACCCGCAGACGACTGAACACCCGCTGGCGACGGCTGGCGGCGG AGCAACGGGAGAGCCTCAAGTCCCTGATCCTGACGGCCCTGCAGAGAAACAGAGCACTGTGTGAGCCTCAGCC TGGCCCAGCTCTCAGCCACCATTTTTCGAAAGGAAGGCTTGGAGGCCTGGCCACAGCTTTTGCAGCTGCTTCAGC ACAGTACCCACAGCCCCACAGCCCAGAGAGAGAGAGATGGGGCTTTTGCTGCTAAGTGTGGTGGTGACCTCCCGGC $\verb|CCGAGGCCTTCCAACCCCACCACCGGGAGCTTCTTCGGCTTCTGAATGAGACTCTTGGTGAGGTGGGCTCTCCTG|\\$ GGCTGCTCTTCTACTCCCTGCGCACTCTGACCACCATGGCTCCCTACCTCAGCACTGAAGATGTGCCTCTCGCTC GGATGTTGGTGCCCAAGCTGATCATGGCCATGCAGACTCTGATCCCCATAGATGAGGCCAAAGGCCTGTGAGGCCC TTGAGGCTTTGGATGAACTGTTGGAGTCAGAGGTGCCGGTCATCACCCCCTACCTCTGAAGTCCTCACATTCT GCCTGGAGGTAGCTAGAAATGTGGCCCTGGGCAATGCGATACGCATACGTATTCTCTGCTGCCTCACTTTCTTGG TCAAAGTCAAGAGCAAGGCCTTACTGAAGAATCGTCTCCTGCCACCCTTGCTGCACACCCTTTTCCCCCATTGTGG CTGCTGAGCCCCCACCAGGCCAGTTGGATCCCGAGGACCAGGATTCAGAAGAGGAAGAGTTGGAGATTGAGCTGA TGGGGGAGACTCCCAAGCATTTCGCTGTACAAGTTGTGGACATGCTGGCACTACACCTGCCCCCGAGAAGCTCT GTCCCCAGCTGATGCCCATGTTGGAAGAGGCTTTGCGGAGCGAGAGCCCATACCAGCGCAAAGCTGGACTCCTGG TGCTGGCCGTGCTGTCTGACGGAGCTGGCGACCACATCAGGCAGAGACTGCTGCCCCCACTGCTGCAGATTGTGT GCAAGGGCCTGGAGGACCCCTCGCAAGTTGTACGCAATGCTGCGCTGTTTGCCCTGGGCCAGTTCTCAGAAAACC TACAGCCCCATATCAGCAGCTATTCAAGGGAGGTAATGCCACTGCTCCTCGCCTACTTGAAGTCGGTGCCTCTTG GACACACACCACCTAGCCAAGGCCTGCTATGCCCTGGAGAATTTTGTGGAGAACCTAGGGCCCAAGGTGCAGC CCTACCTTCCGGAGCTTATGGAATGCATGCTGCAGCTTCTGAGGAACCCCAGCAGTCCCCGGGCCAAGGAGCTGG CTGTGAGCGCCCTGGGAGCCATTGCTACGGCTGCCCAGGTCTCGCTGCCCTACTTCCCTGCCATCATGGAGC ACCTGCGGGAATTCCTGTTAACAGGCCGTGAGGACCTTCAGCCTGTGCAGATCCAGAGCCTGGAGACACTGGGGG ACCAGGTAGACGACGCTGACTTGCGGCGCTGCACGTACAGCCTATTTGCAGCCTTATCGGGTCTGATGGGTGAGG GCCTGGCGCCCCACTTGGAACAGATCACCACGCTCATGCTGCTGTCACTGCGTTCCACCGAGGGCATTGTGCCTC AGTATGACGGGAGCAGCTCCTTCCTTCTGTTTGACGATGAGAGTGATGGGGAAGAAGAGAGGAGGAGCTCATGGATG AAGAAGTATTTAAACTGCTGGAGTGCCCTCACCTGAATGTGCGGAAGGCAGCCCATGAGGCTCTGGGTCAGTTTT GCTGTGCACTGCACAAGGCCTGTCAAAGCTGCCCCTCGGAACCCCAACACTGCTGCTTTGCAGGCTGCCCTGGCCC GAGTCGTGCCATCCTACATGCAGGCAGTGAACAGGGAGCGGGAACGCCAGGTGGTGATGGCCGTGCTGGAGGCCC TGACAGGGGTGCTCCGCAGCTGTGGGACCCTCACACTGAAGCCCCCTGGGCGCCTCGCTGAGCTCTGTGGCGTGC TCAAGGCTGTGCTGCAGAGGAAGACAGCCTGTCAGGATACTGACGAGGAGGAGGAAGAGGAAGATGATGATCAGG CTGAATACGACGCCATGTTGCTGGAGCACGCTGGAGAGGCCATCCCTGCCCTGGCAGCCGCCGGCTGGGGGAGACT CCTTTGCCCCATTCTTTGCCGGTTTCCTGCCATTATTGGTGTGCAAGACAAAACAGGGCTGCACAGTGGCAGAGA AGTCCTTTGCAGTGGGGACCTTGGCAGAGACTATTCAGGGCCTGGGTGCTGCCTCAGCCCAGTTTGTGTCTCGGC TGCTCCCTGTGCTGTTGAGCACCGCCCAAGAGGCAGACCCCGAGGTGCGAAGCAATGCCATCTTCGGGATGGGCG TGCTGGCAGAGCATGGGGGCCACCCTGCCCAGGAACACTTCCCCAAGCTGCTGGGGCTCCTTTTTCCCCTCCTGG $\tt CGCGGGAGCGACATGATCGTGTCCGTGACAACATCTGTGGGGCACTTGCCCGCCTGTTGATGGCCAGTCCCACCA$ GGAAACCAGAGCCCCAGGTGCTGGCTGCCCTACTGCATGCCCTGCCACTGAAGGAGGACTTGGAGGAGTGGGTCA $\verb|CCATTGGGCGCCTCTTCAGCTTCCTGTACCAGAGCAGCCCTGACCAGGTTATAGATGTGGCTCCCGAGCTTCTGC| \\$ GTATCTGCAGCCTCATTCTGGCTGACAACAAGATCCCACCAGACACCAAGGCCGCACTGTTGCTGCTCCTGACGT TCCTGGCCAAACAGCACCGACAGCTTTCAAGCAGCTCTGGGCTCACTGCCTGTTGACAAGGCTCAGGAGCTCC AGGCTGTACTGGGCCTCTCCTAGACTGCAGGCTGCAGCCAGTCCAGAGAGAATAGAGCCTGCCCA

1344/2682 FIGURE 1214

MESAGLEQLLRELLLPDTERIRRATEQLQIVLRAPAALPALCDLLASAADPQIRQFAAVLTRRRLNTRWRRLAAE
QRESLKSLILTALQRETEHCVSLSLAQLSATIFRKEGLEAWPQLLQLLQHSTHSPHSPEREMGLLLLSVVVTSRP
EAFQPHHRELLRLINETLGEVGSPGLLFYSLRTLTTMAPYLSTEDVPLARMLVPKLIMAMQTLIPIDEAKACEAL
EALDELLESEVPVITPYLSEVLTFCLEVARNVALGNAIRIRLCCLTFLVKVKSKALLKNRLLPPLLHTLFPIVA
AEPPPGQLDPEDQDSEEEELEIELMGETPKHFAVQVVDMLALHLPPEKLCPQLMPMLEEALRSESPYQRKAGLLV
LAVLSDGAGDHIRQRLLPPLLQIVCKGLEDPSQVVRNAALFALGQFSENLQPHISSYSREVMPLLLAYLKSVPLG
HTHHLAKACYALENFVENLGPKVQPYLPELMECMLQLLRNPSSPRAKELAVSALGAIATAAQVSLLPYFPAIMEH
LREFLLTGREDLQPVQIQSLETLGVLARAVGEPMRPLAEECCQLGLGLCDQVDDADLRRCTYSLFAALSGLMGEG
LAPHLEQITTLMLLSLRSTEGIVPQYDGSSSFLLFDDESDGEEEEELMDEDVEEEDDSEISGYSVENAFFDEKED
TCAAVGEISVNTSVAFLPYMESVFEEVFKLLECPHLNVRKAAHEALGQFCCALHKACQSCPSEPNTAALQAALAR
VVPSYMQAVNRERERQVVMAVLEALTGVLRSCGTLTLKPPGRLAELCGVLKAVLQRKTACQDTDEEEEEEDDDQA
EYDAMLLEHAGEAIPALAAAAGGDSFAPFFAGFLPLLVCKTKQGCTVAEKSFAVGTLAETIQGLGAASAQFVSRL
LPVLLSTAQEADPEVRSNAIFGMGVLAEHGGHPAQEHFPKLLGLLFPLLARERHDRVRDNICGALARLLMASPTR
KPEPQVLAALLHALPLKEDLEEWVTIGRLFSFLYQSSPDQVIDVAPELLRICSLILADNKIPPDTKAALLLLLLTF
LAKQHTDSFQAALGSLPVDKAQELQAVLGLS

1345/2682 FIGURE 1215

1346/2682 FIGURE 1216

 $\label{thm:constraint} $$ \texttt{MAENSGRAGKSSGSGAGKGAVSAEQVIAGFNRLRQEQRGLASKAAELEMELNEHSLVIDTLKEVDETRKCYRMVG} $$ \texttt{GVLVERTVKEVLPALENNKEQIQKIIETLTQQLQAKGKELNEFREKHNIRLMGEDEKPAAKENSEGAGAKASSAGVLVS}$$$

1347/2682 FIGURE 1217

1348/2682 FIGURE 1218

MAAAVLGQLGALWIHNLRSRGKLALGVLPQSYIHTSASLDISRKWEKKNKIVYPPQLPGEPRRPAEIYHCRRQIK YSKDKMWYLAKLIRGMSIDQALAQLEFNDKKGAKIIKEVLLEAQDMAVRDHNVEFRSNLYIAESTSGRGQCLKRI RYHGRGRFGIMEKVYCHYFVKLVEGPPPPPEPPKTAVAHAKEYIQQLRSRTIVHTL

1349/2682 FIGURE 1219

GATCCGCCACCATGCCTGAAGGAGAGAATGAAGTGAGATGGGATGGACTCTGCAGCAGAGATTCAACTACTAGGG ATCGTCCATCAGACGGGCTTTCAAATACCGAGTCTTCGGATGGGTTGAATAAGCTACTTGCTCATCTGCTTATGC TTTCTAAGAGGTGTCCCTTCAAAGATGTGAGAGAGAAAAGTGAGTTTATTCTGAAGAGCATCCAGGAACTTGGCA TTAGAATTCCTCGACCACTAGGACAGGGACCAAGCAGATTCATCCCAGAAAAGGAGATCCTCCAAGTGGGGAGTG AAGACGCACAGATGCATGCTTTATTTGCAGATTCTTTTGCTGCTTTTGGGCCGTTTGGATAACATTACGTTAGTGA CCCTACATTATCGTCACTACATTGGAATAATGGCTGCGGCAAGACATCAGTGCTCCTACTTAGTGAACCTGCATG TAAATGATTTCCTTCATGTTGGTGGGGACCCCAAGTGGCTCAATGGTTTAGAGAATGCTCCTCAAAAACTACAGA ATTTAGGAGAACTTAACAAAGTGTTAGCCCATAGACCTTGGCTTATTACCAAAGAACACATTGAGGGACTTTTAA AAGCTGAAGAGCACAGCTGGTCCCTTGCGGAATTGGTACATGCAGTAGTTTTACTCACACACTATCATTCTCTTG CCTCATTCACATTCGGCTGTGGAATCAGTCCAGAAATTCATTGTGATGGTGGCCACACATTCAGACCTCCTTCTG TTAGCAACTACTGCATCTGTGACATTACAAATGGCAATCACAGTGTGGATGAGATGCCGGTCAACTCAGCAGAAA ATGTTTCTGTAAGTGATTCTTTCTTTGAGGTTGAAGCCCTCATGGAAAAGATGAGGCAGTTACAGGAATGTCGAG CTTCAGATGATGAAGAAGTTACACCAGCAAGAGCTGTATCTCGTCATTTTGAGGATACTAGTTATGGCTATAAAG ATTTCTCTAGACATGGGATGCATGTTCCAACATTTCGTGTCCAGGACTATTGCTGGGAAGATCATGGTTATTCTT ATACAATGGCAATGCACAAAGATGTTGATACCTCAATGCTTAGACGGGCAATTTGGAACTATATTCACTGCATGT TTGGAATAAGATATGATGATTATGACTATGGTGAAATTAACCAGCTATTGGATCGTAGCTTTAAAGTTTATATCA AAACTGTTGTTTGCACTCCTGAAAAGGTTACCAAAAGAATGTATGATAGCTTCTGGAGGCAGTTCAAGCACTCTG AGAAGGTTCATGTTAATCTGCTTCTTATAGAAGCTAGGATGCAAGCAGAACTCCTTTATGCTCTGAGAGCCATTA $\verb|CCCGCTATATGACC| \textbf{TGA} \\ \texttt{TGCCTTTCCTTCATTAAAGATGATTCTGGAATGATCAGCAGATATAGTCTACAAGGGGG}\\$ GAAGGTACTAAGCCCCAGGACCAATGGTAGACAAAATAATTCAGAAATCCATTGTGCCATGATTCCTTTAGTTTC TGCTATTTTTCTGTGGAAAACCACTGCTGGCACAAGCAGTGACTGTTTGGCAGCTTCAAGTTTAGAGCTGTGAAG ACAGGCTGCCATTCACAGTATTTTGCTTTTTGACAGTACAAGATGCTGTGTAACTGTTTTAATACAGCAAATAGT AACTCTCCAAATCCTGTTGCTTTATGTTAAATAAGATAACAAGAATTGGAGCATGCAAAGAATGGGACTTGGAT TTTCAAATTAAACTTGCATTATGTGTTAATTTTCTTGCATCTAAAAAAGCATAGAATTCCTACTCACACAGCTCA GCAACAACCATTTTGATGGTAACAGTTAATTTCTTTCATTAGTTTTTTAAATTCAGGGTTCTGGATATTAAATTA AAATGGCATTCTTAAAGATTTTCTTCAAAAAGCAATCCTAAATGAAAGTGTGTAAATTATAAGAAGCTGGCGATC TTTTGATATGCTGTTTCACAGGATCCTGACACTGGAGGGCAGCTGTCTTGTGCATTACTTGTGTTCCCAGCACCA TGGTCCCCACTTTAAAGGCTGTGCAGCTCCTTAAATAATAAAGCTGGAAAATATTTTTAGTCGGGTTATCAAATT TGATTTACAAAAACGCTAACTTTGTTTGAAATGCAAACAGGTTTGAAAATATGTATTAAGTACTTTGTATTCTGG AAAAAAAAA

1350/2682 FIGURE 1220

MAEGENEVRWDGLCSRDSTTRETALENIRQTILRKTEYLRSVKETPHRPSDGLSNTESSDGLNKLLAHLLMLSKR CPFKDVREKSEFILKSIQELGIRIPRPLGQGPSRFIPEKEILQVGSEDAQMHALFADSFAALGRLDNITLVMVFH PQYLESFLKTQHYLLQMDGPLPLHYRHYIGIMAAARHQCSYLVNLHVNDFLHVGGDFKWLNGLENAPQKLQNLGE LNKVLAHRPWLITKEHIEGLLKAEEHSWSLAELVHAVVLLTHYHSLASFTFGCGISPEIHCDGGHTFRPPSVSNY CICDITNGNHSVDEMPVNSAENVSVSDSFFEVEALMEKMRQLQECRDEEEASQEEMASRFEIEKRESMFVFSSDD EEVTPARAVSRHFEDTSYGYKDFSRHGMHVPTFRVQDYCWEDHGYSLVNRLYPDVGQLIDEKFHIAYNLTYNTMA MHKDVDTSMLRRAIWNYIHCMFGIRYDDYDYGEINQLLDRSFKVYIKTVVCTPEKVTKRMYDSFWRQFKHSEKVH VNLLLIEARMQAELLYALRAITRYMT

1351/2682 FIGURE 1221

ATAGTTGACCAGCTTCTGCAGGGGCTCCTCAGTGAGAGAATGGAGGTGAGGTCAGGGACTCCTGCCTTGCCTCTG AGGAATTTGTAAGTGTCTGGGTTCGAGATCCTAGGATTCAGAAGGAGGACTTCTGGCATTCTTACATTGACTATG AGATATGTATTCATACTAATAGCATGTGTTTTACAATGAAAACATCCTGTGTACGAAGAAGATATAGAGAATTCG TGTGGCTGAGGCAGAGACTCCAAAGTAATGCGTTGCTGGTACAACTGCCAGAACTTCCATCTAAAAAACCTGTTTT TCAACATGAACAATCGCCAGCACGTGGATCAGCGTCGCCAGGGTCTGGAAGATTTCCTCAGAAAAGTCCTACAGA ATGCACTTTTGCTTTCAGATAGCAGCCTTCACCTCTTCTTACAGAGCCATCTGAATTCAGAAGACATTGAGGCGT GTGTTTCTGGGCAGACTAAGTACTCTGTGGAAGAAGCAATTCACAAGTTTGCCTTAATGAATAGACGTTTCCCTG AAGAAGATGAAGAAGAAAAAAAAAAATGATATAGATTATGATTCAGAAAGTTCATCCTCTGGGCTTGGACACA GTAGTGATGACATCAGTTCACATGGATGTAAAGTAAATACAGCTCCGCAGGAATCC<u>TGA</u>AAAATAATTCTAATGT TACTATCTTAGGAATAGCAAATTATGTCCAGTCATAGAGAAGAAGCTTCATAATAATACATTCTTACCTAAAGC ATTTTAGGTAAGCTTCTGTGTAAAGCTAAAAATCCTGTGAATACAATACTATCCTTTACAGGCAGACATTATTGG TAAACAAGATCTTGCCCTCCAATGAAATGACTTACATGTTTTAAAAAACCGAGTTGGTTTTATTGAATTTAAAAA GATAGGTAACTAAGTAGCATTTAAAATCAAGATAGAGCATTCCTTCTTGTATCAGTGGGGCAGTGTTACCATAAA CACGGTGTATATGTTGTTAAACCCTATGAAGAGTAACAGTGTAGACCAGACTGCCTCTCTCAGATATGTGCCTGA TATTTTGTGGATACCTCCCCTGCACTGGCAAAACACTATGCTTTTGGGTGTTAGACTGAAATATTTTAAGAGTAT TTAACCTTTCCAGTATTCTGTTTCACGCTTAGATGGAAATGTATCTTATGAATAGAGACATATTAAAATAATGTT TACATCTTAGAAAAACATAGATAGTGCTAGTAATATTACTTATAACTGTAATATATAGATTCAGAAATACATTT TCATTATCCAAAATCAGCTTCAACAAATGGTTTCTGGAGACAAATAATTTGTTTTCATTATCATTGTATAATCAG GTTAATGATTTATTTTTTGACTAAATGTGCAATTTCTTATCACTAGATAACTTTCAGTATCAGTGGTGGTTACTT AAAAGGATGTCGACTTGCTAATTTCAGAAATAATTATTCATTTTTAAAAAAGCCCCTTTTAAAAGCATCTACTTGAA GATTGGTATAATTTTCATAAAATGTCTTTTTTTTTAGTGTCCCAAAGATATCTTAGATAAACTATTTTGAAGTTC AGATTTCAGATGAGGCAACATTTTCTTGAGATAATTACCCAAGTTTCATCCATGTTGAATGGTACAAAATATTTC TGTGAAACTAACAGGAAGATATTTTCAGATAACTAGGATAACTTGTTGCTTTGTTACCCAGCCTAATTGAAGAGT GGCAGAGGCTACTACAAAAAGCAACCTTTTCATTTTCACTAAGAGTTTAAAAAGCTATTGTATTAATAAAAGTCT TTACAATGCTTGTTTCAAAGAACCAACAGAAAAAAAAGCTAAGAAAACTGAGAACTAACATTAAAAAAATTAAAT TTAGAATAAGAATGATTTCTTTAATTTGTCCTTTTTTTCTTTGGTCTAAAACATTATTAAATTTTTGTAAATATT TTGATTTAATGTGTCTTAGATCCTCATTATTTTAATACAGGAAAAGAAAAGATTTAGTAATTTCTTACCATGCTA ATATGTAAAGTTCATGCCATCCAGGCATTTAAGAGCGATCCTCATCCCTTCAGCAATATGTATTTGAGTTCACAC TATTTCTGTTTTACAGCAGTTTTGAAAAACACATACTATGCCACCAATTGTCATATTATTTTTAGATGATGTAAC ATAGCCATCAAAATTAATATTATGTAATGCCTAATACTTAGTATGTAAATGTCACGAGATCATTTTTACATTAAA CGTGA

1352/2682 FIGURE 1222

 $\label{thm:mapping} MFPEQQKEEFVSVWVRDPRIQKEDFWHSYIDYEICIHTNSMCFTMKTSCVRRRYREFVWLRQRLQSNALLVQLPE\\ LPSKNLFFNMNNRQHVDQRRQGLEDFLRKVLQNALLLSDSSLHLFLQSHLNSEDIEACVSGQTKYSVEEAIHKFA\\ LMNRRFPEEDEEGKKENDIDYDSESSSSGLGHSSDDISSHGCKVNTAPQES$

1353/2682 FIGURE 1223A

GCGCCGCCTCCCGCAGCCCGCCGCCGCCCGCCCGCCCGGGCCACTGCAGGGGCCGCTAACGGTCCGGCGCCCC CTCGGCGTCCGCGCGCCCCAGCCTGGCGGACGAGCCCGGCGGCGAGATGGGGGCGACGGGGGCGGCGGAGCCG CTGCAATCCGTGCTGTGGGTGAAGCAGCAGCGCTGCGCCGTGAGCCTGGAGCCCGCGGGGCTCTGCTGCGCTGG TGGCGGAGCCCGGGGCCCGGAGCCGGCGCCCCCGGCGCGCTGCTCTGTGCCTGTATCTGAGATCATCGCC GTTGAGGAAACAGACGTTCACGGGAAACATCAAGGCAGTGGAAAATGGCAGAAAATGGAAAAGCCTTACGCTTTT ACAGTTCACTGTGTAAAGAGAGCACGACGGCACCGCTGGAAGTGGGCGCAGGTGACTTTCTGGTGTCCAGAGGAG CAGCTGTGTCACTTGTGGCTGCAGACCCTGCGGGAGATGCTGGAGAAGCTGACGTCCAGACCAAAGCATTTACTG TTAGCCTCCATCACCACTGACATCATCGTTACTGAACATGCTAATCAGGCCAAGGAGACTCTGTATGAGATTAAC ATAGACAAATACGACGGCATCGTCTGTGTCGGCGGAGATGGTATGTTCAGCGAGGTGCTGCACGGTCTGATTGGG AGGACGCAGAGGAGCGCCGGGGTCGACCAGAACCACCCCCGGGCTGTGCTGGTCCCCAGTAGCCTCCGGATTGGA ATCATTCCCGCAGGGTCAACGGACTGCGTGTGTTACTCCACCGTGGGCACCAGCGACGCAGAAACCTCGGCGCTG CATATCGTTGTTGGGGACTCGCTGGCCATGGATGTCCTCAGTCCACCACAACAGCACACTCCTTCGCTACTCC GTGTCCCTGCTGGGCTACGGCTTCTACGGGGACATCATCAAGGACAGTGAGAAAACGGTGGTTGGGTCTTGCC CAGCTGGAGGAGGAGCAGAAGAAAGCACTGTATGGTTTGGAAGCTGCGGAGGACGTGGAGGAGTGGCAAGTCGTC TGTGGGAAGTTTCTGGCCATCAATGCCACAAACATGTCCTGTGCTTGTCGCCGGAGCCCCAGGGGCCTCTCCCCG GCTGCCCACTTGGGAGACGGGTCTTCTGACCTCATCCTCATCCGGAAATGCTCCAGGTTCAATTTTCTGAGATTT CTCATCAGGCACCACCAGCAGGACCAGTTTGACTTCACTTTTGTTGAAGTTTATCGCGTCAAGAAATTCCAG TTTACGTCGAAGCACATGGAGGATGAGGACAGCGACCTCAAGGAGGGGGGGAAGAAGCGCTTTGGGCACATTTGC AGCAGCCACCCTCCTGCTGCTGCACCGTCTCCAACAGCTCCTGGAACTGCGATGGGGAGGTCCTGCACAGCCCT GCCATCGAGGTCAGAGTCCACTGCCAGCTGGTTCGACTCTTTGCACGAGGAATTGAAGAGAATCCGAAGCCAGAC TCACACAGCTGAGAAGCCGGCGTCCTGCTCACAAACTGGGAAAGTGTGAAAACTATTTAAGATAATTATTACAGA $\tt CTTTTGTCAACAATTTTGTGTACATATTTGGCATTTTCAGTTCTGTACGCATCTGCGGGTTGCAGCCCACGCCGC$ ${\tt TTACTCTCAGCGGATGCAGCTGCTCACTTGGGGGCCACTGGCCTCTTAGGTTTTAACGATGTCAACAGTGTAGTTT}$ AGAAAATGGCCCGTTAGTGGCTCTATTGCAATAATGTTAGGGACATTATATGATTTCCACGCAGGTCACACCATC TGGGCCTGAGGTAGCAGTGGGTCACTTTGATCCACTTTGCAGGACTTATTCTGTAACGGTTTGTGGCCAAGTTTT GGGAAGTGGTTGATTATCTTTGCCTTCATTTCACCTTCCTCTTCGTTTACGGTTAGGACATCGCTGCTTGATCCT TACAATACTGTGCAACTGCAATGCAACGTGGCCCTGCTTCAGGTGATCCGCGGGAGGGGCCTCCACGCCAGCGCC GGGAAGGCTGCTGGGGCCTCCACACCTGCCTCATCACGGCGGGGGGGCTACGACAATCCGGCTGGGAGCATGACC TTGGCGTCTGTTCTGGGAGCACAGATGATAAGCTCTGGAAGCTGGCAGTGTGTAAAGCACTGGCAAGTTTGTTAC TGTTAAAATGTCAAATACCAATGCTTTATATCGACGCGAAGTGCTTAACACAGCCGGGCTTGGGGGCAGTCAGGA GGAAGCTGGCCATCCGTGGAGGAGGGGCCGGTCCTGGACTCCCGCAGGACTCCTCTGATGCAGGGCCTGAAGTCT CTGCAGCGCAAGGGCTCCGGCGACCAGAGGATTCTTCCCGGAAGGCATTCCTGCCGCGCTCCCCGGGGCACCCCT AATATGAGAATATGCGGCTTAAACTTTGATCTGTAAGGAGCGGGGCCGTGGCCGTTTGGAGCACGCTGTAGACAC CGTTCCTCATGCTGCCGGGTGGGTTTTGCAGAAGCTCCCTTAGTGATTTCACGTTTAACAGGCAGCATCCATTTT TCAGGTGAAAGGGCAGCTTTAATGGTGGTTTTTATGGACCACATTATCAGAGAGCACTGTGCAAGCCAAATGGTT CAATAATGAATGAAAATTCTGGGTGTAAAGAGTAAATATGCCCTGGCTCTTTCTACCAATGTTTGCTCCTGGTTG GAAAGAAACCAAAGATTTAAGACGGGCTGCTCTTCCAGACTGGCTGTGCCTGTGCCCAGCAACCTGTGCAG $\tt CCGGCAGTGTGCCTGGTGTCACGCCAGGAGGCTGTGGCTGTGGGCCCTCTGGAATTGTGCTCCTCACAAAGT$ TTCCCCAAAAGGTTCTTCTAAGCCTTTATTGTCCCTGGTAAATGTTTCCCGGCTGGGCGCGGTGGCTCACGCCTG TAATCCCAGCACTTTGGGAGGCCGAGGCGGGTGGATCACCTAAGGTCAGGAGTTTGAGATCAGCCTGCCCAACAT

1354/2682 FIGURE 1223B

1355/2682 FIGURE 1224

MGAMGAAEPLHSVLWVKRRRCAVSLEPARALLRWWRSPEPGPSAPGADARSVLVSEIIAVEEKDDCEKHASSGRW
HKMENPFAFTVHRVKRVRHHRWKWARVTFWSADEQLCHLWLQTLRGLLESLTSRPKHLLVFINPFGGKGQGKRIY
EKTVAPLFTLASITTEIIITEHANQAKETLYEINTDSYDGIVCVGGDGMFSEVLHGVIGRTQQSAGIDPNHPRAV
LVPSTLRIGIIPAGSTDCVCYSTVGTNDAETSALHIIIGDSLAIDVSSVHYHNTLLRYSVSLLGYGFYGDLIKDS
EKKRWMGLVRYDFSGLKTFLSHQYYEGTLSFLPAQHTVGSPRDNKPCRAGCFVCRQSKQQLEEEEKKALYGLENA
EEVEEWQVTCGKFLAINATNMSCACPRSPGGLSPFAHLGDGSSDLILIRKCSRFNFLRFLIRHTNQEDQFDFTFV
EVYRVKKFHFTSKHVEDEDNDSKEQEKQKFGKICKDRPSCTCSASRSSWNCDGEVMHSPAIEVRVHCQLVRLFAR
GIEEES

1356/2682 FIGURE 1225

CCGGCTGTCGGTCTCGCCGCCGCCGCCCGCCATCGTGGAGCTGGGGCCCCCTTTTGCCTGGGAGTTTTG ${\tt TAGTCGCCTAGGGTCAGCGGTGACATCCCAAAGGGCAGGCCGGCAGCCGCCA\underline{TG}{\tt GTGGCCAAGGATTACCCCTT}}$ CTACCTCACGGTCAAGAGAGCGAACTGCAGCCTGGAGCTACCTCCGGCCAGCGGTCCGGCCAAGGACGCTGAGGA GCCATTAAAGCGCTTCAGTCAAACCCTGCAGCGCTCCATTAGCTTCCGCAGTGAGAGCCGCCCTGACATCCTCGC CCCCGACCCTGGTCCAGAAATGCCGCCCCTCGAGCACGAAACGGAGAGATAGCAAGCTGTGGAGTGAGACCTT CGATGTGTGCGTCAATCAGATGCTTACATCCAAGGAAATCAAACGTCAGGAGGCGATCTTTGAGCTTTCCCAAGG AGAAGAAGACTTGATAGAAGACTTGAAATTAGCAAAAAAGGCCTATCATGACCCCATGCTGAAACTCTCCATAAT GACAGAACAAGAGTTGAATCAAATTTTTGGAACACTGGACTCTCTAATTCCTCTACATGAAGAGCTCCTTAGTCA CAGCTCCTATGATAGCTACTGCAGCAATCAAGTAGCCGCCAAAGCTCTGCTGGACCACAAAAAGCAAGATCACCG AGTCCAGGATTTCCTACAGCGATGTTTAGAATCCCCCTTTAGCCGCAAACTAGATCTCTGGAATTTCCTCGATAT TCAGCAGCACTTGGAAGAAGCTATAAATATCATTCAGGGAATTGTGGCAGAAATCAACACCAAGACTGGTGAATC TGAATGCCGCTATTATAAAGAGCGGCTTCTTTACTTGGAAGAAGGCCAGAAAGACTCCCTGATCGACAGCTCTCG AGTCTTGTGTTGTCATGGTGAACTGAAGAACAATCGGGGCGTGAAACTGCATGTTTTCCTGTTCCAAGAAGTGCT TGTGATCACTCGAGCCGTCACCCACAATGAGCAGCTTTGCTACCAGCTGTACCGTCAGCCAATCCCCGTGAAAGA CCTCCTGCTGGAAGACCTCCAGGATGGAGAAGTGAGGCTGGGTGGCTCCCTGCGAGGGGCATTCAGCAACAATGA GAGAATTAAAAACTTCTTCAGAGTCAGTTTCAAAAATGGATCCCAAAGTCAGACCCACTCGCTACAAGCCAATGA CACTTTCAACAAACAGCAGTGGCTTAACTGTATTCGTCAAGCCAAAGAAACAGTTTTGTGTGCTGCCGGGCAAGC TGGGGTGCTTGACTCCGAGGGATCGTTCCTAAATCCCACCACCGGGAGCAGAGAGCTACAGGGAGAAACAAAACT TGAGCAGATGGACCAATCGGACAGTGAGTCAGACTGTAGTATGGACACGAGTGAGGTCAGCCTCGACTGTGAGCG CATGCAACAGACAGACTCTTCCTGTGGAAACAGCAGGCACGGTGAAAGTAACGTC**TGA**CAGAAGCATGTGCACTT $\tt CGGGAAGCAGGCCTGCATCTTACCTGTACAGTATTTGCATTCCACAGATGGAACGGTTTGGAGAAGCACTTTTTC$ ATACTTTTGTGAAAGTATACATGTTGGCCCAGTCTCTCGTATCTGTACCTTTGTCCCTAGTACTGTAACTGCCAA GGTACTCAAACAAGTTACTTTCAGTTGTCCTGCTGGATTTTAAAAAAATAGAAAAAGAATCTCAAAACTACTGTT TTACATAGATTGTTTGAAGAGTCCTTCCTCTTGTGCTTCTGTACCACTTTCCCAGCTCTTAGATGTGGTAGCTAA AATCAGGAAAGACCAACTCATGAAGTGAACTTGGTTTGATCTTACTCAACTAGAAAGCTTGAAAACATCCCTGGG GATTCTGAAGGCTTAATTTTGCAAAGGAGGATGCATTGTCTGAACTTTGCAACTTCATCCAGTGCAAGTTTGATG CAAGAATGTATTAGGACATAAAATAGAGGCTGACCTTAAAAGGGCCAGGACAGAAGCGGCTGCCAGCTCTGAATC CAAAGGGCTTAGGAAGGCCTGCCAGGATAACAAGAAGGCCCTGTATTCATTGTGTTTCATCTGCCTAGGCCTACT CATTATTTTAGAGAATGAATGAAGCAACAAGGAAGAAGAACATGACTCTATCGATGACACTGTTTATAGAAAACA CAGGAGAGGAAGAATTTGGAATGAAAAGCACTTCGTCAGAACCTTCTGTGGGAGCCATTGAGAGAAAAGCATGGT CCAGTGCCTTCTGAGAAAGGCCAGAGCTTTGGGCTTTCCTGCTCTGCTTTTGGGTCGTCAATTTGCCATCTCTGG TAGCCAGATTAGTAACCTCTTTGTCCAGCCTTGATTTACAGTGCAGGGTAAAGTGCAGACCTTAAAAACAGCTAA GTACCTAGAAGAGCTCCCTGCAAGTGTAAATATTAAGGATGACCTGTGCAAAATTATACCCACACCAGCACTAGT TGCATTGATGTCATTTTATTATGTACATATATCATGTGCATTCAAGCTGTGTGACAAGATATATCAATATAAAAA CAAGGTATATACTTTATTTTTTTTGAAAACAAGGATATTGTGATCAATTTTACCCTGTAAAACATATTTCTGTA ACAGCAAGTGAACCTGCTGCAGACAGAAGCAGAGAAAGCCAAGAACAGCCTTTATTGGTGAAGAAAAGAATGAA TGATTCTTTGTAGGCGCCATCAGCCACTTTTAGAAGCCATCAGCCAGTGTGTTGGGAAAAGAGGTTTGTCAAGTG TTGGCCTATGGGAAGGTGGTCAATGAATGTTTTGATGAAATGTTTTTTGTATAATGGCCTTAAACTTTTCTG GAAGTATTTCAAATAAATTACATTATTAAGTCATCA

1357/2682 FIGURE 1226

MVAKDYPFYLTVKRANCSLELPPASGPAKDAEEPSNKRVKPLSRVTSLANLIPPVKATPLKRFSQTLQRSISFRS ESRPDILAPRPWSRNAAPSSTKRRDSKLWSETFDVCVNQMLTSKEIKRQEAIFELSQGEEDLIEDLKLAKKAYHD PMLKLSIMTEQELNQIFGTLDSLIPLHEELLSQLRDVRKPDGSTEHVGPILVGWLPCLSSYDSYCSNQVAAKALL DHKKQDHRVQDFLQRCLESPFSRKLDLWNFLDIPRSRLVKYPLLLREILRHTPNDNPDQQHLEEAINIIQGIVAE INTKTGESECRYYKERLLYLEEGQKDSLIDSSRVLCCHGELKNNRGVKLHVFLFQEVLVITRAVTHNEQLCYQLY RQPIPVKDLLLEDLQDGEVRLGGSLRGAFSNNERIKNFFRVSFKNGSQSQTHSLQANDTFNKQQWLNCIRQAKET VLCAAGQAGVLDSEGSFLNPTTGSRELQGETKLEQMDQSDSESDCSMDTSEVSLDCERMEQTDSSCGNSRHGESN V

1358/2682 FIGURE 1227

AGAAGGGCAACCTCGTGCTTTCTGCAGAGGAGACCGGAGGGCAGAAGGCAGAGTCCAGGCTTAGACTGCAGTTCC TCGCTTACCTGTGCAGTCTAATTTTGAGCTGCCTCTTTGTAGTCTTAAAAGGCAGGAGCTTCGTGTTGTGGGTCT $\texttt{GCTAACCCGTACGTTTCCGTGGGCAAGTCGTGTGTACTCCTCGCC} \underline{\textbf{ATG}} \\ \texttt{GCTCAGCTCCAAACACGCTTCTACACT}$ GATAACAAGAAATATGCCGTAGATGATGTTCCCTTCTCAATCCCTGCTGCCTCTGAAATTGCCGACCTTAGTAAC ATCATCAATAAACTACTAAAGGACAAAAATGAGTTCCACAAACATGTGGAGTTTGATTTCCTTATTAAGGGCCAG TTTCTGCGAATGCCCTTGGACAACACATGGAAGTGGAGAACATCTCATCAGAAGAAGTTGTGGAAATAGAATAC GTGGAGAAGTGTACCGCACCCCAGCCAGAGCAATGCATGTTCCATGATGACTGGATCAGTTCAATTAAAGGGGCA ATTGTGGGACATACGGATGTTGTAAAAGATGTGGCCTGGGTGAAAAAAGATAGTTTGTCCTGCTTATTATTGAGT GCTTCTATGGATCAGACTATTCTCTTATGGGAGTGGAATGTAGAGAGAAACAAAGTGAAAGCCCTACACTGCTGT AGAGGTCATGCTGGAAGTGTAGATTCTATAGCTGTTGATGGCTCAGGAACTAAATTTTGCAGTGGCTCCTGGGAT AAGATGCTAAAGATCTGGTCTACAGTCCCTACAGATGAAGAAGATGAAATGGAGGAĞTCCACAAATCGACCAAGA AAGAAACAGAAGACAGAACAGTTGGGACTAACAAGGACTCCCATAGTGACCCTCTCTGGCCACATGGAGGCAGTT TCCTCAGTTCTGTGGTCAGATGCTGAAGAAATCTGCAGTGCATCTTGGGACCATACAATTAGAGTGTGGGATGTT GGGTCTGGCAGTCTTAAGTCAACTTTGACAGGAAATAAAGTGTTTAATTGTATTTCCTATTCTCCACTTTGTAAA CGTTTAGCATCTGGAAGCACAGATAGGCATATCAGACTGTGGGATCCCCGAACTAAAGATGGTTCTTTGGTGTCG CTGTCCCTAACGTCACATACTGGTTGGGTGACATCAGTAAAATGGTCTCCTACCCATGAACAGCAGCTGATTTCA GGATCTTTAGATAACATTGTTAAGCTGTGGGATACAAGAAGTTGTAAGGCTCCTCTCTATGATCTGGCTGCTCAT GAAGACAAAGTTCTGAGTGTAGACTGGACAGACACAGGGCTACTTCTGAGTGGAGGAGCAGACAATAAATTGTAT ${\tt TCCTACAGATATTCACCTACCACTTCCCATGTTGGGGCA} {\tt TGA} {\tt AAGTGAACAATAATTTGACTATAGAGATTATTT}$ CTGTAAATGAAATTGGTAGAGAACCATGAAATTACATAGATGCAGATGCAGAAAGCAGCCTTTTGAAGTTTATAT AATGTTTTCACCCTTCATAACAGCTAACGTATCACTTTTTCTTATTTTGTATTTATAATAAGATAGGTTGTGTTT ATGAAATACAAACTGTGGCATACATTCTCTATACAAACTTGAAATTAAACTGAGTTTTACATTTCTCTTT

1359/2682 FIGURE 1228

MAQLQTRFYTDNKKYAVDDVPFSIPAASEIADLSNIINKLLKDKNEFHKHVEFDFLIKGQFLRMPLDKHMEVENI SSEEVVEIEYVEKCTAPQPEQCMFHDDWISSIKGAEEWILTGSYDKTSRIWSLEGKSIMTIVGHTDVVKDVAWVK KDSLSCLLLSASMDQTILLWEWNVERNKVKALHCCRGHAGSVDSIAVDGSGTKFCSGSWDKMLKIWSTVPTDEED EMEESTNRPRKKQKTEQLGLTRTPIVTLSGHMEAVSSVLWSDAEEICSASWDHTIRVWDVGSGSLKSTLTGNKVF NCISYSPLCKRLASGSTDRHIRLWDPRTKDGSLVSLSLTSHTGWVTSVKWSPTHEQQLISGSLDNIVKLWDTRSC KAPLYDLAAHEDKVLSVDWTDTGLLLSGGADNKLYSYRYSPTTSHVGA

1360/2682 FIGURE 1229

GTTGGATGGCGCAGGTTGGAGCGTGGCGAACAGGGGCTCTGGGCCTGCTGCTGCTGCTCGGCCTCGGAC TAGGCCTGGAGGCCGCGGAGCCCGCTTTCCACCCCGACCTCTGCCCAGGCCGCAGGCCCCAGCTCAGGCTCGT GCCCACCAAGTTCCAGTGCCGCACCAGTGGCTTATGCGTGCCCTCACCTGGCGCTGCGACAGGGACTTGG ACTGCAGCGATGGCAGCGATGAGGAGGAGTGCAGGATTGAGCCATGTACCCAGAAAGGGCAATGCCCACCGCCCC CTGGCCTCCCTGCCCTGCACCGGCGTCAGTGACTGCTCTGGGGGGAACTGACAAGAAACTGCGCAACTGCAGCC GCCTGGCCTGCCTAGCAGGCGAGCTCCGTTGCACGCTGAGCGATGACTGCATTCCACTCACGTGGCGCTGCGACG GCCACCCAGACTGTCCCGACTCCAGCGACGCGCGCTCGGCTGTGGAACCAATGAGATCCTCCCGGAAGGGGATGCCA CAACCATGGGGCCCCCTGTGACCCTGGAGAGTGTCACCTCTCTCAGGAATGCCACAACCATGGGGCCCCCTGTGA $\tt CCCTGGAGAGTGTCCCCTCTGTCGGGAATGCCACATCCTCCTCTGCCGGAGACCAGTCTGGAAGCCCAACTGCCT$ ATGGGGTTATTGCAGCTGCTGCGGTGCTCAGTGCAAGCCTGGTCACCGCCACCCTCCTTTTTGTCCTGGCTCC GAGCCCAGGAGCGCCTCCGCCCACTGGGGTTACTGGTGGCCATGAAGGAGTCCCTGCTGCTGTCAGAACAGAAGA TGATGCGGATGGGTACCCGGGCACACCAGCCCTCAGAGACCTGAGCTCTTCTGGCCACGTGGAACCTCGAACCCG AGCTCCTGCAGAAGTGGCCCTGGAGATTGAGGGTCCCTGGACACTCCCTATGGAGATCCGGGGAGCTAGGATGGG GAACCTGCCACAGCCAGAACTGAGGGGCTGGCCCCAGGCAGCTCCCAGGGGGTAGAACGGCCCTGTGCTTAAGAC ACTCCTGCTGCCCCGTCTGAGGGTGGCGATTAAAGTTGCT

FIGURE 1230

MSGGWMAQVGAWRTGALGLALLLLLGLGLGLEAAASPLSTPTSAQAAGPSSGSCPPTKFQCRTSGLCVPLTWRCD RDLDCSDGSDEEECRIEPCTQKGQCPPPPGLPCPCTGVSDCSGGTDKKLRNCSRLACLAGELRCTLSDDCIPLTW RCDGHPDCPDSSDELGCGTNEILPEGDATTMGPPVTLESVTSLRNATTMGPPVTLESVPSVGNATSSSAGDQSGS PTAYGVIAAAAVLSASLVTATLLLLSWLRAQERLRPLGLLVAMKESLLLSEQKTSLP

1362/2682 FIGURE 1231

 $\tt CGGAAGCAGGAAGTGAGTTTGCGAACGGAGCAGCTGCTGCAGGGCCC\underline{\textbf{ATG}} \texttt{GCGGACACCCAGTACATCCTGCCCA}$ ATGACATCGGCGTGTCTAGCCTGGACTGCCGTGAGGCCTTCCGCCTGCTGTCACCCACAGAGCGCCTCTATGCCT ACCACCTGTCCCGTGCCGCCTGGTACGGAGGCCTGGCTGTGCTTCAGACCTCCCCTGAGGCCCCCTACATCT ATGCTCTGCTCAGCCGCCTCTTCCGCGCCCAGGACCCCGACCAGCTGCGCCAACATGCCCTGGCTGAAGGCCTTA CCGAGGAGGAGTATCAGGCGTTCCTGGTCTATGCCGCGGGTGTTTACTCCAACATGGGCAACTACAAGTCCTTTG GTGACACCAAGTTTGTTCCCAACTTGCCCAAGGAAAAGCTGGAACGGGTGATCCTAGGGAGTGAGGCTGCTCAGC AGCACCCAGAAGAAGTCAGGGGCCTCTGGCAGACCTGCGGGGGAGCTTATGTTCTCTCTGGAGCCAAGGCTTCGAC ACCTCGGACTGGGGAAGGAGGGAATCACCACCTATTTCTCTGGGAATTGTACCATGGAAGATGCCAAATTGGCCC AGGACTTTCTGGACTCACAGAACCTCAGTGCCTACAACACCCGGCTCTTCAAAGAGGTCGATGGAGAAGGGAAGC CCTACTACGAGGTGCGGCTGGCTTCTGTGCTTGGCTCAGAGCCTTCCCTGGACTCTGAGGTGACTTCCAAGCTGA AGAGCTATGAATTCCGGGGAAGCCCTTTCCAGGTGACCCGGGGGGACTACGCGCCCATCCTCCAGAAGGTGGTGG AGCAGCTGGAGAAAGCCAAGGCCTATGCAGCCAACAGCCACCAGGGGCAGATGCTGGCCCAGTATATAGAGAGCT TCACCCAGGGCTCCATCGAGGCCCACAAGAGGGGCTCCCGCTTCTGGATCCAGGACAAAGGCCCCATCGTGGAGA GTTACATCGGGTTCATCGAGAGCTACCGCGACCCCTTTGGTTCCCGAGGAGAATTTGAAGGTTTCGTAGCTGTGG TGAACAAGGCCATGAGTGCCAAGTTTGAGCGGCTGGTGGCGAGCGCAGAGCAGCTGCTGAAGGAGCTGCCCTGGC CCCCAACCTTTGAGAAGGACAAGTTCCTCACCCTGACTTCACCTCCCTGGATGTTCTCACCTTCGCTGGCTCCG GCATCCCTGCCGGCATCAACATCCCCAACTACGATGATCTGAGGCAGACGGAAGGCTTTAAGAACGTGTCGCTGG GGAATGTGCTGGCTGTGGCCTACGCCACGCAGCGGGAGAAGCTTACCTTTCTGGAGGAGGATGACAAGGACCTGT ACATCCTCTGGAAGGGGCCCTCCTTCGATGTGCAGGTGGGCCTGCACGAGCTGCTGGGCCATGGCAGTGGCAAGC TCTTCGTACAGGACGAAAAAGGAGCATTCAACTTTGACCAGGAAACAGTGATCAACCCAGAGACGGGCGAGCAGA TTCAGAGCTGGTATCGGAGCGGGGAGACCTGGGATAGCAAGTTCAGCACCATCGCCTCCAGCTACGAAGAGTGCC GGGCTGAGAGCGTGGGTCTCTACCTCTGTCTCCACCCGCAAGTGCTGGAGATCTTTGGCTTTGAGGGGGCTGATG AGGCCTTCAACTGGCGACAGGCCCATATGCAGGCCCGGTTTGTGATCCTGAGAGTCTTGCTGGAGGCTGGCGAGG GACTCGTTACCATCACTCCCACCACAGGCTCCGATGGGCCCCAGATGCCCGGGTCCGCCTCGACCGCAGCAAGA TCCGGTCTGTGGGCAAGCCTGCTCTAGAGCGCTTCCTGCGGAGACTTCAGGTGCTGAAGTCCACAGGGGATGTGG ACACGGTGCTGCGTAAGGAATCTCGGAAGCTCATTGTTCAGCCCAACACTCGCCTTGAAGGCTCAGACGTGC AGCTTCTGGAATACGAGGCGTCAGCTGCCTCATCCGATCCTTCTCTGAGCGTTTCCCAGAGGATGGACCCG AGTTGGAGGAGATCCTCACACAGCTGGCCACAGCCGATGCCCGATTCTGGAAGGGCCCCAGTGAGGCCCCATCTG GCCAAGCT<u>TGA</u>GGAAGATGTGTGGCCTTGCCCCCAATTCCATCAGACCAAGGCTGCAAGTGGCCCTCCATTCGTG CAACCCCTTCCATTTGTCAGCACTTTCCAGCCTGCCAATTGCTTCCCCTCTGTGATCTCATTTCATCTGCACTGC CATACGTGGAGTGAGCAAGACAGGGCTTACCATCCTGTCTACCAGATGAGGAAATGGCAGTTCTGAGAAGTCACT GGTCTAGATCCCGCAGGTGGCACGTGACAGCTAGGGTTCAAAACGTTCTCACCAAATCCAATGCTCCTCACATAT

1363/2682 FIGURE 1232

MADTQYILPNDIGVSSLDCREAFRLLSPTERLYAYHLSRAAWYGGLAVLLQTSPEAPYIYALLSRLFRAQDPDQL RQHALAEGLTEEEYQAFLVYAAGVYSNMGNYKSFGDTKFVPNLPKEKLERVILGSEAAQQHPEEVRGLWHTCGEL MFSLEPRLRHLGLGKEGITTYFSGNCTMEDAKLAQDFLDSQNLSAYNTRLFKEVDGEGKPYYEVRLASVLGSEPS LDSEVTSKLKSYEFRGSPFQVTRGDYAPILQKVVEQLEKAKAYAANSHQGQMLAQYIESFTQGSIEAHKRGSRFW IQDKGPIVESYIGFIESYRDPFGSRGEFEGFVAVVNKAMSAKFERLVASAEQLLKELPWPPTFEKDKFLTPDFTS LDVLTFAGSGIPAGINIPNYDDLRQTEGFKNVSLGNVLAVAYATQREKLTFLEEDDKDLYILWKGPSFDVQVGLH ELLGHGSGKLFVQDEKGAFNFDQETVINPETGEQIQSWYRSGETWDSKFSTIASSYEECRAESVGLYLCLHPQVL EIFGFEGADAEDVIYVNWLNMVRAGLLALEFYTPEAFNWRQAHMQARFVILRVLLEAGEGLVTITPTTGSDGRPD ARVRLDRSKIRSVGKPALERFLRRLQVLKSTGDVAGGRALYEGYATVTDAPPECFLTLRDTVLLRKESRKLIVQP NTHLEGSDVQLLEYEASAAGLIRSFSERFPEDGPELEEILTQLATADARFWKGPSEAPSGQA

1364/2682 FIGURE 1233

1365/2682 FIGURE 1234

MVSVNSSHCFYNDSFKYTLYGCMFSMVFVLGLVSNCVAIYIFICVLKVRNETTTYMINLAMSDLLFVFTLPFRIF YFTTRNWPFGDLLCKISVMLFYTNMYGSILFLTCISVDRFLAIVYPFKSKTLRTKRNAKIVCTGVWLTVIGGSAP AVFVQSTHSQGNNASEACFENFPEATWKTYLSRIVIFIEIVGFFIPLILNVTCSSMVLKTLTKPVTLSRSKINKT KVLKMIFVHLIIFCFCFVPYNINLILYSLVRTQTFVNCSVVAAVRTMYPITLCIAVSNCCFDPIVYYFTSDTIQN SIKMKNWSVRRSDFRFSEVHGAENFIQHNLQTLKSKIFDNESAA

1366/2682 FIGURE 1235

AGAAGGCCTCGCACAAAACACTGTACAAACCCGAAAGGAAGTCTGAGAGACGAACCGCCTTCCTCCCTGAAGCTT TGGAGTTGGAGACTGAGACCAGTGGACCAGAGCGGCCTCCGGAGAAGCCACGGAAACATGACAGCGGTGCGGCGG ACTTGGAGCGGGTCACCGACTATGCAGAGGAGAAGGAGATCCAGAGTTCCAATCTGGAGACGGCCATGTCTGTGA AGGAAGATCTGGAGCTAATAATGACTGAGATGGAGATATCTCGAGCAGCAGCAGCAGCAGTTTGCGGGAACACA $\tt TGGGCAACGTGGTAGAGGCGCTTATTGCCCTAACCAAC\underline{TGA}\underline{TGCGTGCTTTCTCAAATATACCTACTGGATTAAT$ TTATGGCAATAAAATTTTTTTTTTTTTTTTCAGTTTTATCATCTTGGGTCAAGTAGAGTGTATACTATATCCTA TGTTGTGGAGAATTTATATGTTGGAGACTAACTGAATTTAAGTGACCCATTAAAATCTAGCACACCTGTATGAAA AGTATTCAAGGTACATCTGGAGTCTCAGCAGAGTTACTGTACTCAAATGGCATGTGTCTCCAAGACAGCTTATGA GTGCTGTGGCTCACGCCTCTAATCCCAGCACTTTGGGAGGTCGAGGCAGGTAGATCACGAGGTCAGGAATTCAAG ACCAGCCTGGCCAACATGTGAAACCCCGTCTCCACTGAAAATAGAAAAATTAGCTGGGCATGGTGGTGGGCGCCT ATAATCCCAGCTATTCTGGAGGCTGAGGCAGGAATCGCTTGAAATTGGAAAGCAGAGGTTGCAGTGAGCTGAGAT

1367/2682 FIGURE 1236

 ${\tt MATEGOVELELETETSGPERPPEKPRKHDSGAADLERVTDYAEEKEIQSSNLETAMSVIGDRRSREQKAKQEREKELAKVTIKKEDLELIMTEMEISRAAAERSLREHMGNVVEALIALTN}$

1368/2682 FIGURE 1237

FIGURE 1238

 $\label{thm:composition} {\tt MAGLELLSDQGYRVDGRRAGELRKIQARMGVFAQADGSAYIEQGNTKALAVVYGPHEIRGSRARALPDRALVNCQ} $$ YSSATFSTGERKRRPHGDRKSCEMGLQLRQTFEAAILTQLHPRSQIDIYVQVLQADGGTYAACVNAATLAVLDAG IPMRDFVCACSAGFVDGTALADLSHVEEAAGGPQLALALLPASGQIALLEMDARLHEDHLERVLEAAAQAARDVH $$ TLLDRVVRQHVREASILLGD$$.$

1370/2682 FIGURE 1239

1371/2682 FIGURE 1240

 ${\tt MPSKSLVMEYLAHPSTLGLAVGVACGMCLGWSLRVCFGMLPKSKTSKTHTDTESEASILGDSGEYKMILVVRNDL}\\ {\tt KMGKGKVAAQCSHAAVSAYKQIQRRNPEMLKQWEYCGQPKVVVKAPDEETLIALLAHAKMLGLTVSLIQDAGRTQ}\\ {\tt IAPGSQTVLGIGPGPADLIDKVTGHLKLY}\\$

1372/2682 FIGURE 1241

GGCACGAGGCCAGGCGACTCCGGGACAGGGGGTCTCGGCCGTCGGCGTCATCGTTTCGCGCGTGCAGCTCCCGCC TGAGATCCAGCTGGCTCAGCGCCTGGCGGGGAATGAGCAGGTGACCCGGGACCGGGCGGTGAGGAAGCTCCGGAA ATACATCGTCGCCAGGACTCAGCGGGCCGCAGGTGGTTTTACGCACGACGAGCTGCTGAAGGTGTGGAAAGGACT TGCTTTTCAGACCACGGAGGCGCAGCACCTGTTCCTTCAGGCCTTCTGGCAGACCATGAATCGCGAGTGGACGGG CATTGACAGGCTGCGCCTGGATAAATTCTACATGCTCATGCGGATGGTCCTGAACGAGTCCTTGAAGGTTCTGAA GATGCAAGGCTGGGAAGAAGACAGATCGAGGAGCTGCTAGAGCTGCTGATGACTGAGATCCTGCACCCCAGCAG CCAGGCCCCCAACGGTGTGAAGAGCCACTTCATCGAGATCTTCCTGGAGGAGCTGACCAAAGTGGGCGCCGAGGA GCTTACGGCAGACCAGAACCTGAAGTTCATCGACCCCTTCTGCAGAATCGCTGCCCGGACCAAGGATTCCTTGGT TGAACTGGACACACAGGATGAGGAGGTGGCGTCGGACAGTGATGAGTCCTCTGAGGGTGGTGAGCGTGGAGACGC GCTGTCCCAGAAGAGGTCTGAGAAGCCGCCCGCAGGCTCCATCTGCAGGGCTGAACCTGAGGCTGAGGAGCA GGCAGGTGACGACAGGGACAGTGGCGGCCCCGTTCTCCAGTTTGACTACGAGGCAGTTGCTAACAGACTGTTTGA AATGGCCAGCCGCCAGAGCACCCCTTCTCAGAACAGAAAGCGTCTCTACAAAGTGATCCGGAAGCTGCAGGACCT GGCAGGAGGCATTTTCCCTGAAGATGAGATCCCAGAGAAGGCCTGCAGGCGCCTGCTTGAAGGGAGGCGGCAGAA GAAGACGAAGAAGCAGAAGCGTCTGCTCAGGTTGCAGCAGGAGAGAGGGGAAAGGTGAGAAGGAGCCCCCGAGCCC GGGCATGGAGAGGAGGAGGAGGAGGAGGAGGGGGTGTAGGGGCCGACCCCGAGGCGGCGGGCAGAGGCTGGTGAGCA GCCAGGCACAGCTGAGCGGGCCCTGCTCCGAGATCAGCCCAGGGGCCGTGGCCAGAGAGGGGCTCGCCAGAGAAG GAGGACACCTCGGCCCCTGACCAGTGCCCGAGCAAAGGCGGCCAATGTCCAGGAGCCGGAGAAGAAGAAGAAACG $\texttt{CAGGGAG} \underline{\textbf{TGA}} \texttt{TGTGGCCGGGGCCAAGGACAGGCAGGGAGGGAGGCCAGGCCTCGCTTGCACCGCGGGACGAGGCTG}$ GAGATGGGCCCATCATTAGGGGCCAGCATCCCAGGAACTGGACCTTTCCCCAGAGCCTCCGCCTGTGGCTGTGAT GGTTCAGAAAATAAAATGCCGCGCAGCCCTTGCCAGGGAAGTGTCGCTTCGGGTGTGTCCTACGGACGTGTGGGA GGTGGCAGGCGCCAGCCTCCGAGCAGTGTGGTGGTTATATTCATGTTTGTGGAAAAATCTTGCAAGACATTTCT CCTTTCACAGAACTGCCCAGGTGTTAACAGGGCTGTCTGGACGGGGCTCTTTTGCTTCCCCCTCAATCTGGGGTC GGCTTCCGCGAGAGCCTTGTTCCTGGAGGCAGGAGCGCCCCGCCATCCTGGGTACCCGCGGGTCCGCAGGCTGCG CACCTCTTTCCCTCAGCCAGGTCACCCTCAGCGTCCTCCCTGCCCCTTCCCCTTCACACCTGCTGGAGCCTGTG AGGGAGGTGGCGGGTCCCCACTGTGGCGACGGAGAGCTGACAGTAGCCCAGGGCTTTCTACCTGCATGGAACAAG GGCCTGTCTGCCGCCAGCGCTGTGGCCACAGCCTGCATAGGTGACAAGGGGCCGCTGCGTTGGGTTTTGCCCGCA TCTTCTGTTCCATGGGTGCCCAGCCAGCCAGGCCGTGTGGGATCCAGCGAGAGGCCAGGGCTTGGAGTGGGCCTG GGACCAGGAAGGACCTCTAGGCTGTGGCTGGCCTTGTGCAGACCCTGGACTGCATCCGGTTCCCCAAAGCCCTGC TGCATTCGAGTGTCCCCCAACCCCGGGCAGGTGGCACCTGGTGACACCTCCTTCAGTCCCACTCAGCTGGGCGGC $\tt CGGGGCAGGCTTAGGGGCAGGTTAGGGGCCAAGGAGGGGAAGGCCAGGGCCCCTGTTCTAGGGGTTAGGGTTCT$ TTCCCCAAAGGAACTTAAAAAGACAAGCGTGGCCAGGCACAGTGGCTCACACCTGTAATCCCAGCACTTTGGGAG GCCGAGGTGGCCAGATCACCTGAGGTCAGGAGTTTGAGACCAGACTGACCAACATGGAGAAACCCCATCTCTACT AAAATACAAAATTAGCCAGGCGTGGTGGCACATGCCTGTAATCCCAGCTACTCGGGAGGCTGAGGCAGGAGAATT GCTTGAACCTGGGAGGCAGAGGTTGTGGTGAGCTAAGATCACGCCATTGCACTCCAGCCTGGGCAACGAGAGGGA AACTCTGTTTCAAAAAAAAAAAAAAAAAAAAA

1373/2682 FIGURE 1242

MVSRVQLPPEIQLAQRLAGNEQVTRDRAVRKLRKYIVARTQRAAGGFTHDELLKVWKGLFYCMWMQDKPLLQEEL GRTISQLVHAFQTTEAQHLFLQAFWQTMNREWTGIDRLRLDKFYMLMRMVLNESLKVLKMQGWEERQIEELLELL MTEILHPSSQAPNGVKSHFIEIFLEELTKVGAEELTADQNLKFIDPFCRIAARTKDSLVLNNITRGIFETIVEQA PLAIEDLLNELDTQDEEVASDSDESSEGGERGDALSQKRSEKPPAGSICRAEPEAGEEQAGDDRDSGGPVLQFDY EAVANRLFEMASRQSTPSQNRKRLYKVIRKLQDLAGGIFPEDEIPEKACRRLLEGRRQKKTKKQKRLLRLQQERG KGEKEPPSPGMERKRSRRRGVGADPEARAEAGEQPGTAERALLRDQPRGRGQRGARQRRRTPRPLTSARAKAANV QEPEKKKKRRE

1374/2682 FIGURE 1243

GGCGCTCGCAGAGCCGGAAAGAAGTGCTGTAAGGGACGCTCGGGGGACGCTGTTCCTGAGGTGTCGCCGCCTCCC ${\tt CGCGGATC} \underline{\textbf{ATG}} \texttt{TACCAGGATTATCCCGGGAACTTTGACACCTCGTCCCGGGGCAGCAGCGGCTCTCCTGCGCACG}$ TCCCCACCATCAACGCCATCACGACCAGCCAGGACCTGCAGTGGATGGTGCAGCCCACAGTGATCACCTCCATGT CCAACCCATACCCTCGCTCGCACCCCTACAGCCCCCTGCCGGGCCTGGCCTCTGTCCCTGGACACATGGCCCTCC CAAGACCTGGCGTGATCAAGACCATTGGCACCACCGTGGGCCGCAGGAGGAGAGATGAGCAGCTGTCTCCTGAAG TGACAGAGAAGCTGCAGGCGGAGACAGAGGAGCTGGAGGAGGAGAAGTCAGGCCTGCAGAAGGAGATTGCTGAGC TGCAGAAGGAGAAGGAGAAGCTGGAGTTCATGTTGGTGGCTCACGGCCCAGTGTGCAAGATTAGCCCCGAGGAGC GCCGATCGCCCCAGCCCCTGGGCTGCAGCCCATGCGCAGTGGGGGTGGCTCGGTGGGCGCTGTAGTGGTGAAAC AGGAGCCCCTGGAAGAGGACAGCCCCTCGTCCTCGTCGGCGGGGCTGGACAAGGCCCAGCGCTCTGTCATCAAGC CCATCAGCATTGCTGGGGGGCTTCTACGGTGAGGAGCCCCTGCACACCCCCATCGTGGTGACCTCCACACCTGCTG AATCCTGCTCCAAGGCTCACCGCAGAAGCAGTAGCAGCGGGGACCAATCATCAGACTCCTTGAACTCCCCCACTC CAGCACCTTCAAGCGCTCCAGGGCCGTGAGGGCCAAGAGGGGGACCTGCCACCAGGGAGCTTCCTGGCTCTGGGGG TTCATCTTGCAAGCAAATCCCATTTCTTGAAAAGCCTTGGAGAACTCGGTTTGGTAGACTTGGACATCTCTCTGG CTTCTGAAGAGCCTGAAGCTGGCCTGGACCATTCCTGTCCCTTTGTTACCATACTGTCTCTGGAGTGATGGTGTC CTTCCCTGCCCCACCACGCATGCTCAGTGCCTTTTGGTTTCACCTTCCCTCGACTTGACCCTTTCCTCCCCCAGC GTCAGTTTCACTCCCTCTTGGTTTTTATCAAATTTGCCATGACATTTCATCTGGGTGGTCTGAATATTAAAGCTC

1375/2682 FIGURE 1244

MYQDYPGNFDTSSRGSSGSPAHAESYSSGGGGQQKFRVDMPGSGSAFIPTINAITTSQDLQWMVQPTVITSMSNP YPRSHPYSPLPGLASVPGHMALPRPGVIKTIGTTVGRRRRDEQLSPEEEEKRRIRRERNKLAAAKCRNRRRELTE KLQAETEELEEEKSGLQKEIAELQKEKEKLEFMLVAHGPVCKISPEERRSPPAPGLQPMRSGGGSVGAVVVKQEP LEEDSPSSSSAGLDKAQRSVIKPISIAGGFYGEEPLHTPIVVTSTPAVTPGTSNLVFTYPSVLEQESPASPSESC SKAHRRSSSSGDQSSDSLNSPTLLAL

1376/2682 FIGURE 1245

 $\tt CTGA{\color{red}{ATG}} GAGCTGGTCGCTGGTTGCTACGAGCAGGTCCTCTTTGGGTTCGCTGTACACCCGGAGCCCAAGGCTTG$ TGTAAATAGTCGTTTTGTGGTCACTGGGAGCAAAGATGAAACAATTCACATTTATGACATGAAAAAAGAAGATTGA GCATGGGGCTCTAGTGCATCACAGTGGTACAATAACTTGCCTGAAATTCTATGGCAACAGGCATTTAATCAGTGG AGCGGAAGATGGACTCATCTGTATCTGGGATGCAAAGAAATGGGAATGCCTGAAGTCAATTAAAGCTCACAAAGG GTGGAATCTTGTAGAAGGAAGATCAGCATTCATAAAAAATATAAAACAAAATGCTCACATAGTAGAATGGTCCCC AAGAGGAGAGCAGTATGTAGTTATCATACAGAATAAAATAGACATCTATCAGCTTGACACTGCATCCATTAGTGG AGAAGTTATAAGGTTTTTTGACTGTGATTCACTAGTGTGCCTCTGCGAATTTAAAGCTCATGAAAACAGGGTAAA GGACATGTTCAGTTTTGAAATTCCAGAGCATCATGTTATTGTTTCAGCATCGAGTGATGGTTTCATCAAAATGTG GAAGCTTAAGCAGGATAAGAAAGTTCCCCCATCTTTACTCTGTGAAATAAACACTAATGCCAGGCTGACGTGTCT ACAGTCCAAAATTGGCAAAAAGGAGCCTGGTGACACAGTGCACAAAGAAGAAAAAGCGGTCAAAAACCTAACACAAA ${\tt GGTAGAAATGTTGGAAAAGAAGAAGAAAAGAAGAAAATAAAAACAATGCAG{\tt TGA}{\tt ATCACAGATGTCTCCTGAAA}$

1377/2682 FIGURE 1246

MELVAGCYEQVLFGFAVHPEPKACGDHEQWTLVADFTHHAHTASLSAVAVNSRFVVTGSKDETIHIYDMKKKIEH GALVHHSGTITCLKFYGNRHLISGAEDGLICIWDAKKWECLKSIKAHKGQVTFLSIHPSGKLALSVGTDKTLRTW NLVEGRSAFIKNIKQNAHIVEWSPRGEQYVVIIQNKIDIYQLDTASISGTITNEKRISSVKFLSESVLAVAGDEE VIRFFDCDSLVCLCEFKAHENRVKDMFSFEIPEHHVIVSASSDGFIKMWKLKQDKKVPPSLLCEINTNARLTCLG VWLDKVADMKSLPPAAEPSPVSKEQSKIGKKEPGDTVHKEEKRSKPNTKKRGLTGDSKKATKESGLISTKKRKMV EMLEKKRKKKKIKTMQ

1378/2682 FIGURE 1247

ACTCATGGAACAATTATTGGCATTACTTCAGGGATTGTCTTGGTCCTTCTCATTATTTCTATTTTAGTACAAGTG AAACAGCCTCGAAAAAAGGTCATGGCTTGCAAAACCGCTTTTAATAAAACCGGGTTCCAAGAAGTGTTTGATCCT AACTACCAGAGGATGCGGCGCCTCCCACCGCCTCCCGCTGCATCCACGACCACCACTGTGGGTCGCAGGCCTCC ATGAAAACATTTAATAGCACCTTCAAGAAAAGTAGTTACACTTTCAAACAGGGACATGAGTGCCCTGAGCAGGCC CTGGAAGACCGAGTAATGGAGGAGATTCCCTGTGAAATTTATGTCAGGGGGCGAGAAGATTCTGCACAAGCATCC ACCATACTGTTTCCAGCAGCCAACCCTTTTCTCCCATCACAACTACGAAGACCTTGATTTACCGTTAACCTATTG TATGGTGATGTTTTTATTCTCTCAGGCAGTCTATATATGTTAAACCAATCAAGGAACTTACTCTATTCAGTGGAA ACAATAATCATCTCTATTGCTTGGTGTCATTTATAGGAAGCACTGCCAGTTAAAGAGCATTAGAAGAGGTGGTTG GATGGAGCCAGGCTCAGGCTGCCTCTTCGTTTTAGCAACAAGAAGACTGCTCTTGACTGATAACAGCTCTGTCAA TATTTTGATGCCACAATAAACTTGATTTTCTTTACATTCCTTTATTTTTCCTTTCTCTAAATTTAATTTGTTT TATAAGCCTATCGTTTTACCATTTCCTTACATAAGTACAAGTGGTTAATGTACCACATACTTCAGTATAG GCATTTGTTCTTGAGTGTCAAAATACAGCTAGTTACTGTGCCAATTAAGACCCAGTTGTATTTCACCCATCTG TTTCTTCTTGGCTAATCTCTGTACTTCTGCCTTTTAATTACTGGGCCCTTATTCCTTATTTCTGTGAGAAATAA TAGATGATATGATTTATTACCTTTCAATTATATTTTTCTCAGTTATACTAGAAAATTTCATAATCCTGGGATATA TGTACCATTGTCAGCTATGACTAAAAATTTGAAAAAGATAAAAATTTCTAGCAAGCCTTTGAAGTTTACCAAGTA ATTTATTTGCAATGTTTCTCTTCGCTAGATTGTTACATAGCTCCCATTCTGTTGGTTTTGCTTACAGCATATGGT ${\tt AACCAAGGTTAGATGCCAGTTAAAATTCCTTAGAAATTGGATGAGCCTTGAGATTGCTTCTTAACTGGGACATGA}$ ${\tt CATTTTCTAGCTCTTATCAAGAATAACAACTTCCACTTTTTTTAAACTGCACTTTTGACTTTTTTTATGGTAT}$ AAAAACAATAATTTATAAACATAAAAGCTCATTGTGTTTTTTTAGACTTTTGATATTTTGATACTGTACAAACT TTATTAAATCAAGATGAAAGACCTACAGGACAGATTCCTTTCAGTGTTCACATCAGTGGCTTTGTATGCAAATAT GTTACTGTATTTAGTTTGTGATAAATTTTTCACTGTGTGATATTTATGCTCTAAATCACTACACAAATCCCATAT GAAAGGAACTCATTTATCAAATTGTAAGTAATACAGACATGCCATTTAAAAGAGGTAAATTCTTGTTTTCTATAT TTTGTTAGTAAATTCTCAATGAAATAAGTTGAAGTTTCACTGGATTTCATTAACTTTTAAATATTACATATATGT GTTTTCTCAGATTAGTGAAAATTGTGACCTTAAATTTAATACACATATACTGCCTCAG

1379/2682 FIGURE 1248

MLFTSFVEQKKKAGVFEQITKTHGTIIGITSGIVLVLLIISILVQVKQPRKKVMACKTAFNKTGFQEVFDPPHYE LFSLRDKEISADLADLSEELDNYQRMRRSSTASRCIHDHHCGSQASSVKQSRTNLSSMELPLRNDFAQPQPMKTF NSTFKKSSYTFKQGHECPEQALEDRVMEEIPCEIYVRGREDSAQASISIDF

1380/2682 FIGURE 1249

AAACCCAAAGCGGCCGCCGTAGGCGAAGGTGAAGATCGCCTCTGCCTTTGCTGGTGCAGTGAGAGCAGCTTC AGGAATCCTACGGCCCCTGAATATTTTGGCATCTTCAACCTACCGCAACTGTGTCAAGAATGCCTCTCTTATTTC TGCATTGTCCACTGGACGTTTTAGTCATATTCAGACACCAGTTGTTTCCTCCACTCCCAGACTTACCACATCTGA GAGAAACCTGACATGTGGGCATACCTCAGTGATCCTTAATAGAATGGCCCCCGTGCTTCCAAGTGTCCTGAAGCT GCCAGTCAGATCTCTAACATACTTCAGTGCAAGAAAAGGCAAGAGAAAGACCGTGAAAGCTGTCATCGATAGGTT TCTTCGACTTCATTGTGGCCTTTGGGTGAGGAGAAAGGCCTGGCTATAAGAAAAAATTATGGAAAAAGACACCTGC AAGGAAGAAGCGATTGAGGGAATTTGTATTCTGCAATAAAACCCAGAGTAAACTCTTAGATAAAATGACGACGTC CTTCTGGAAGAGGCGAAACTGGTACGTTGATGATCCTTATCAGAAGTATCATGATCGAACAAACCTGAAAGTATA GATCAGAAGTTTCACTTGTTTCTCAGTTATTGGATATGTATCTTTGTGTACATATCTTTGCAAAAATGGATAAGT ACAAAACTTGATGTAAATTGTACCAATGAATACGTAAACATACAGTGACAACATTAAACTTAGAAAAGTTTTAAA ACTTAATGGATCAGACTTTGCCAGATTTGGTTAGGGAAACAGAAATTTAGAATGGTGCATTATTTTTAACAAATG GTATTGGCTTAACTAGTTGTTTCAGTTATGCTCTTTTAGTTGCAAGGAATCTCAAGTGGGACAAACATAAAAAGA CTCAAAAGCTACAAGTTAGCTCAAGCAATGTGACATTATTTCAAGGATATGTGCCAGGGAATTCAGGAACCACCT CACCAACCCCATCTCCCACTCAGAAATCACCTCCCAGCCTCAGGAAGAGTAGAAATTGGGTGGTGCTCCTCAGCA GGGGAAGGTGGATGTTTAGGCTTGGGCTCTGCATGCATGTGACTTGCTTCTTTTTGCATTGTTAACTCCATTCTC TCTATTCACCAACTTCTCTACACAGCTTTTGCATACTTACAGTTTCTGTTCCTTTGTAATAACTTTAACTTGCAC CTTTGAGGTTCTTTTCTACATGATGACCTTCAGCTCCTGCTGCTAGTCTCCAATTGCCAAGGGAATTTAACTGGG CCAGACTACCTTTTTATACTAGGTCTGGTTGGGTCATTGTCTAGAGTAGGGATTGGCTGTCCTTAAGTCAGGAGC CCGCTTTGTATTAGCAGGTTTGCATGCAGCAAAAAAACAGTTATGTGAGCAGTTTCACTTGGAGGTTCACATGGG GTGGCAGCACACTTAACATCTAACACCAGGTTCATTGTGTTCATAACACTTGTCATTTACTGTAACAACATTT CTTTTTATGCAAGTTTTGAAAGATAGGTATTTATTTTTTCTAGAGACAGGAGTTTTGCTCTGTTGCCCAGGCTGG AGTGCAGTGGTGCAATCATAGCTCATTGAAGCCTCGCACTCCTGGGCTCAAGTGGTCCTCCTGCCTCAGCTTACT GAGTAAGGATATGTATTTCTTAAAAGTTAGTTTATCCACTTCAGATTTCATGTTTTCATTTGTAAGGATAAACTT TTCCCACAAATTTTCAACAATCATTGTAGAAACTAAGGGGGAGAAAGTAATCTCAGTTGTTTTAGAAACGAAAAA GTTAAGCATTGTTTACTTGAAGTGGGCAGGGAAGCAGCACTGAGTAAAGTTCAATTGAGTGGTTACAGTCTAGGG CAGTGGTTCCCAACTCTCCGATCAGAATCATCTGGGAAGCATTTTCAAACAGCAAAGTACTTTGAAAAACCATTAT TAAATAGAATTATGCATGAATTACTGTTTCAGATCCTTTAATGTGGTAGTTGGTAATAATAAGATGAAATTCCTC TGTTGTTAGTAAAATTATGAAATTGAAGTTCTGCAGCATGTCAGGCCAGGATTATTAGGGAAATTCCTCGAAACT AGTGTGTGTTTATTAAAAGGAGAAAGGATAACAATAGAATGTTCTAAAACCAGAAGTCCAAGTGCGTGTCTACTT ATGGGACCAATAAATAAAGAACAGACATTTGATTTGAGGTGAGGTAAAAGCCTGAAACATGGAATGGCATTCTGT TTTGATGGATTTTCATTTCTTCGCACTTCTGAGACGGCAAAGCCAACCACTTAGAAGCCTTCCACATCTTTGTCA CCTGCCTGGCTCCTGCTCTCTGATGTACCTCTGGGTAGTGAGATGGAAATGGTGCCTGCAGAAGTTGGGGAAAG GATACTTTTGCACAGCCTCCATGATGTCTTTATTGCAAATATGGATGACAAGGGTCTCTGTTACAGGGGCCTCAG AGCACCTTCGTTTCTCCTCTAGACCAGGGACAGGTGTAGAGATAAGGACTGGCAACCAGAGCCTCAGCATCCAAA GTGGGTAGGAGGGCTTATCATCAACACTGATTTTATAATCTGACAATAAATGTCTTTCATTAAAGAGTTTACCTA ААТGAAAAAAAAAAAAAAAAAAAAAAAA

1381/2682 FIGURE 1250

MAASAFAGAVRAASGILRPLNILASSTYRNCVKNASLISALSTGRFSHIQTPVVSSTPRLTTSERNLTCGHTSVI LNRMAPVLPSVLKLPVRSLTYFSARKGKRKTVKAVIDRFLRLHCGLWVRRKAGYKKKLWKKTPARKKRLREFVFC NKTQSKLLDKMTTSFWKRRN

1382/2682 FIGURE 1251

AAGGCCCGGCTGTTCCGGCTGTGGCTGGGGGTCGGTGTTCATGATCCTGCTGATCATCGTGTACTGGGAC AGCGCAGGCGCCGCGCACTTCTACTTGCACACGTCCTTCTCTAGGCCGCACACGGGGGCCGCCGCCGCCACGCCC GGGCCGGACAGGGACAGGGAGCTCACGGCCGACTCCGATGTCGACGAGTTTCTGGACAAGTTTCTCAGTGCTGGC GTGAAGCAGAGCGACCTTCCCAGAAAGGAGACGGAGCAGCCGCCTGCGCCGGGGAGCATGGAGGAGAGCGTGAGA CTGCGGGGCTTCTGCGCCAACTCCAGCCTGGCCTTCCCCACCAAGGAGCGCGCATTCGACGACATCCCCAACTCG GAGCTGAGCCACCTGATCGTGGACGACCGGCACGGGGCCATCTACTGCTACGTGCCCAAGGTGGCCTGCACCAAC TGGAAGCGCGTGATGATCGTGCTGAGCGGAAGCCTGCTGCACCGCGGTGCGCCCTACCGCGACCCGCTGCGCATC CCGCGCGAGCACGTGCACAACGCCAGCGCGCACCTGACCTTCAACAAGTTCTGGCGCCCGCTACGGGAAGCTCTCC CGCCACCTCATGAAGGTCAAGCTCAAGAAGTACACCAAGTTCCTCTTCGTGCGCGACCCCTTCGTGCGCCTGATC TCCGCCTTCCGCAGCAAGTTCGAGCTGGAGAACGAGGAGTTCTACCGCAAGTTCGCCGTGCCCATGCTGCGGCTG TACGCCAACCACCACCTGCCCGCCTCGGCGCGCGAGGCCTTCCGCGCTCGAAGGTGTCCTTCGCCAAC ${\tt TTCATCCAGTACCTGCTGGACCCGCACACGGAGAAGCTGGCGCCCTTCAACGAGCACTGGCGGCAGGTGTACCGC}$ CTCTGCCACCCGTGCCAGATCGACTACGACTTCGTGGGGAAGCTGGAGACTCTGGACGAGGACGCCGCCAGCTG GAGGACTGGTTCGCCAAGATCCCCCTGGCCTGGAGGCAGCAGCTGTATAAACTCTACGAGGCCGACTTTGTTCTC $\tt CTGACGCACGCGCACTCCAGTTTTTTATGACCTACGATTTTGCAATCTGGGCTTCTTGTTCACTCCACTGCCTC$ TATCCATTGAGTACTGTATCGATATTGTTTTTTAAGATTAATATTTCAGGTATTTAATACGAAATGTGGAAGG $\tt CCGCTCCTGTGGTTTTTCTGAGCGTGCGGGGCTCCGGGAGGGGATGCTGAGGCTGATGGAGCTGCCTCCAGGGCTA$ ACAAATCCTTCCAGAGGGAAAGTTCTTTGTTTAAGTGTTGTACTTGAAAAGGTCAATCTTCAGGGCTTCCTGTTT GAAGTCAAGTCAGAGGTAAACCGGTCAGTTACAGAAGCAGGATTTCTAGGATTTCTAACTCCAGCTGTTCCCATA ААААААААААААААА

1383/2682 FIGURE 1252

MTKARLFRLWLVLGSVFMILLIIVYWDSAGAAHFYLHTSFSRPHTGPPLPTPGPDRDRELTADSDVDEFLDKFLS AGVKQSDLPRKETEQPPAPGSMEESVRGYDWSPRDARRSPDQGRQQAERRSVLRGFCANSSLAFPTKERAFDDIP NSELSHLIVDDRHGAIYCYVPKVACTNWKRVMIVLSGSLLHRGAPYRDPLRIPREHVHNASAHLTFNKFWRRYGK LSRHLMKVKLKKYTKFLFVRDPFVRLISAFRSKFELENEEFYRKFAVPMLRLYANHTSLPASAREAFRAGLKVSF ANFIQYLLDPHTEKLAPFNEHWRQVYRLCHPCQIDYDFVGKLETLDEDAAQLLQLLQVDRQLRFPPSYRNRTASS WEEDWFAKIPLAWRQQLYKLYEADFVLFGYPKPENLLRD

1384/2682 FIGURE 1253

1385/2682 FIGURE 1254

 ${\tt MSVVRSSVHARWIVGKVIGTKMQKTAKVRVTRLVLDPYLLKYFNKRKTYFAHDALQQCTVGDIVLLRALPVPRAK}\\ {\tt HVKHELAEIVFKVGKVIDPVTGKPCAGTTYLESPLSSETTQLSKNLEELNISSAQ}$

1386/2682 FIGURE 1255

1387/2682 FIGURE 1256

 ${\tt MQAQAPVVVVTQPGVGPGPAPQNSNWQTGMCDCFSDCGVCLCGTFCFPCLGCQVAADMNECCLCGTSVAMRTLYR} \\ {\tt TRYGIPGSICDDYMATLCCPHCTLCQIKRDINRRRAMRTF}$

1388/2682 FIGURE 1257

ACGAGGATCCGGTGTTCCAACCCAGGGGGAAAAATGCGGCCTTTGACTGAAGAGAGACCCGTGTCATGTTTGAG AAGATAGCGAAATACATTGGGGAGAATCTTCAACTGCTGGTGGACCGGCCCGATGGCACCTACTGTTTCCGTCTG CACAACGACCGGGTGTACTATGTGAGTGAGAAGATTATGAAGCTGGCCGCCAATATTTCCGGGGACAAGCTGGTG TCGCTGGGGACCTGCTTTGGAAAATTCACTAAAACCCACAAGTTTCGGTTGCACGTCACAGCTCTGGATTACCTT AAATCTGGTCTGGGTCGAATCACTGAAAATACTTCTCAGTACCAGGGCGTGGTGGTGTTACTCCATGGCAGACATC CCTTTGGGTTTTGGGGTGGCAGCCAAATCTACACAAGACTGCAGAAAAGTAGACCCCATGGCGATTGTGGTATTT CATCAAGCAGACATTGGGGAATATGTGCGGCATGAAGAGACGTTGACT**TAA**AACGAAGCCATTCCAAGGACAGAC GGCTGTATGGAAAGGCCGAGCTTTGTTTCCTGTGTTTGTGTGGACTCCACCATCATGTTGAATTTTGTCAACACT CTGGCCTCTTCAGGGACTTCTTATTTACTGTACTCTCTATCACTGACAAATGCAGGCTGGATTCTTATTATAAC AGAGATGGCTCAAAAATGGGGTTTCAGATCTTTGTGACGAAATAGAATACTGTTTCATATTTGAATCAGAGGGCT TCTTGTTCTGAGAAATAGGTTCAAAATCATTGGAACCAGGAACAAGAATAGCTTATTGTTATCTGTGATAACACT GTTTTCTAAACACAAGGATTTTCTTTTTTAATAATGCAACATAGACATTGCCATAACAGAATAATAAACCACA TGTGGGGTTTTAAAAATGAAATTTGGCTAATAGGAGCAATTCAGCTATTTTTCTATACAGTAATTGGTGTGTGGT ATAGAAGAAAAACGGGTTCAAACCCCACTTCTGCCACCTACCAGCTATATGGCCTTGAATGAGTCATTCAGCTTT AATAAGGTTCATTTTCTTCTGTTTAAAAAGACACAAAACTTGAAAATCAGCTTTGGCCATCTACCTGAGAATTAG AAAGTCTGATTTTTGGAATTAGAAATCATGATTGTAGGCTGGGCACAGTGTCGCGCCTGTAATCCCAGCACTTTG GGAGGCCAAGGCGGACGGATCACTTGAGGTTAGGAGTTTGAGACCAGCCTGGCCAACATGGTGAAACCCCATCTC TACTAAAAAAAA

1389/2682 FIGURE 1258

MRPLTEEETRVMFEKIAKYIGENLQLLVDRPDGTYCFRLHNDRVYYVSEKIMKLAANISGDKLVSLGTCFGKFTK THKFRLHVTALDYLAPYAKYKVWIKPGAEQSFLYGNHVLKSGLGRITENTSQYQGVVVYSMADIPLGFGVAAKST QDCRKVDPMAIVVFHQADIGEYVRHEETLT

1390/2682 FIGURE 1259

GGAAGAAAACCTGAAAAAGACCCCAAAGAAGAATATGAAAATGGTAACTGGAGCCGTAGCGTGCTGGAAGA CGAGGCCACAGACACTTCTGATAGTGAAGGAAGCTGTGGATCGGAAAAGGACCACTTTTATTCTGATGATGACGC AATAGAAGCTGACAGTGAGGGTGATGCTGAGCCCTGTGACAAAGAAAATGAAAATGATGGAGAATCAAGTGTTGG GACTAATATGGGCTGGGCAGATGCTATGGCTAAAGTCCTCAACAAGAAAACTCCTGAAAGTAAACCTACTATTCT TAAGAGGCTGGAGTGGGAAATGATGTGCAGAGTAAAGCCAGATGTTGTCCAAGACAAAGAGAGAAGAGAAATCT TCAGAGAATTGCAACAAGGGGTGTGGTGCAATTATTTAATGCTGTTCAGAAACATCAAAAGAATGTTGATGAAAA TGTTTTGAGAGGGATGGATGGAAGTACAAATGAGACTGCTTCAAGCAGGAAGAAACCAAAAGCCAAACAGACTGA AGTGAAATCAGAAGAAGGCCCAGGTTGGACGATCCTACGTGATGATTTCATGATGGGAGCATCTATGAAAGACTG GGACAAGGAAAGTGATGGGCCAGATGACAGCAGACCAGAATCTGCAAGTGACTCTGATACATAAGCATCATAGG AAATACAATTGCAGTCGTTTTATTTTTTCTAGAAAAATATGTCATCCTCTGATAGTTGGGGAATTATAAGGATAC TTAAAATTATATTTTAAACCCTTGTATAATTTTAAGCATTGTTCCTCAGAACATTTGTAAAAGGATATATTTCTG CTTGACCAGCGAGATGTGCATTTTGCCAGGATCATATTGGTCATGTCTATTGGTGTATTATTTCAGTATCACCAA TGTTTTCAGAAATACAGTACTAATTCATCATTAAACTCTTTGAAGTTAATATTTTTCTGCCTTCTAACTTATAGA CTCAACTATGTATCTGTAGTTTTTGGGAATGGTTGGTGTTTTTTGCTTTGTGTTGGGAAGTTATTGAGAAAACCT ATATAATAAAATTTAAAATTATAGTTTTTCAAA

1391/2682 FIGURE 1260

MKMVTGAVASVLEDEATDTSDSEGSCGSEKDHFYSDDDAIEADSEGDAEPCDKENENDGESSVGTNMGWADAMAK VLNKKTPESKPTILVKNKKLEKEKEKLKQERLEKIKQRDKRLEWEMMCRVKPDVVQDKETERNLQRIATRGVVQL FNAVQKHQKNVDEKVKEAGSSMRKRAKLISTVSKKDFISVLRGMDGSTNETASSRKKPKAKQTEVKSEEGPGWTI LRDDFMMGASMKDWDKESDGPDDSRPESASDSDT

1392/2682 FIGURE 1261

AAACATGAATTCAAACGGCTCATCTTATTTCGACCATTCGGCCCCATCATGAAAGTGAAAATGAAAAGCTCAAC ATGGCCAACACGCTTATCAATGTTATCGTGCCTCTAGCAAAAAGGGTGGACAAGTTCCGGCAGTTCATGCAGAAT TTCAGGCCTGCTGATGAAGTTTTTAGATGTGTGCCTTTAAGCCCTTGATTGTGCGGTGTTGGATCTTAGAAGCTG TGATGGCTCAGATGCACATATTGGCTGAGGATAACCAGCTAAGTGATTTCACCAGCTTGTTTTAAACATAGAAAA CTGTCACCCAGGCTGGAGTGCAGTGGCACGAACTCTGCTCACTGCAACCTTCACCTCCCAGGTTCAGGGAGATGT TACTTGAAAACACTTCCAAAGCTGCCAACTTCAGGAACTTTACCTTCATCCAGCTGAATGGAGAATTTTCTCGGG GAAAGGGACTTGATGTTGGAGCCCGCTTCTGGAAGGGAAGCAACGTCCTTCTCTTTTTCTGTGATGTGGACATCT ACTTCACATCTGAATTCCTCAATACGTGTAGGCTGAATACACAGCCAGGGAAGAAGGTATTTTATCCAGTTCTTT AGAAGGAAACTGGATTTTGGAGAGACTTTGGATTTGGGATGACGTGTCAGTATCGGTCAGACTTCATCAATATAG GTGGGTTTGATCTGGACATCAAAGGCTGGGGCGGAGAGGATGTGCACCTTTATCGCAAGTATCTCCACAGCAACC ${\tt TCATAGTGGTACGGACGCCTGTGCGAGGACTCTTCCACCTCTGGCATGAGAAGCGCTGCATGGACGAGCTGACCC}$ $\verb|CCGAGCAGTACAAGATGTGCATGCAGGCCATGAACGAGGCATCCCACGGCCAGCTGGGCATGCTGGTGT|\\$ AAGGATTGTGGGAGACACTTTTTCTTTCCTTTTGCAATTACTGAAAGTGGCTGCAACAGAGAAAAAGACTTCCATA ${\tt AAGGACGACAAAAGAATTGGACTGATGGGTCAGAGATGAGAAAGCCTCCGATTTCTCTGTTGGGCTTTTTACA}$ ACAGAAATCAAAATCTCCGCTTTGCCTGCAAAAGTAACCCAGTTGCACCCTGTGAAGTGTCTGACAAAGGCAGAA TGCTTGTGAGATTATAAGCCTAATGGTGTGGAGGTTTTGATGGTGTTTACAATACACTGAGACCTGTTGTTTTGT CCTCATATGAATGAGCCTATCAGCAGGGCTCTAGTTTCTAGGAATGCTAAAATATCAGAAGGCAGGAGAGGAGAGT AGGCTTATTATGATACTAGTGAGTACATTAAGTAAAATAAAATGGACCAGAAAAGAAAAGAAACCATAAATATCG TGTCATATTTTCCCCAAGATTAACCAAAAATAATCTGCTTATCTTTTTGGTTGTCCTTTTAACTGTCTCCGTTTT TTTCTTTTATTTAAAAATGCACTTTTTTTCCCTTGTGAGTTATAGTCTGCTTATTTAATTACCACTTTGCAAGCC TTACAAGAGAGCACAAGTTGGCCTACATTTTTATATTTTTTAAGAAGATACTTTGAGATGCATTATGAGAACTTT CAGTTCAAAGCATCAAATTGATGCCATATCCAAGGACATGCCAAATGCTGATTCTGTCAGGCACTGAATGTCAGG CATTGAGACATAGGGAAGGAATGGTTTGTACTAATACAGACGTACAGATACTTTCTCTGAAGAGTATTTTCGAAG AGGAGCAACTGAACACTGGAGGAAAAGAAAATGACACTTTCTGCTTTACAGAAAAGGAAACTCATTCAGACTGGT GATATCGTGATGTACCTAAAAGTCAGAAACCACATTTTCTCCTCAGAAGTAGGGACCGCTTTCTTACCTGTTTAA ATAAACCAAAGTATACCGTGTGAACCAAACAATCTCTTTTCAAAACAGGGTGCTCCTCCTGGCTTCTGGCTTCCA TAAGAAGAAATGGAGAAAATATATATATATATATATATTGTGAAAGATCAATCCATCTGCCAGAATCTAGTG .GGATGGAAGTTTTTGCTACATGTTATCCACCCCAGGCCAGGTGGAAGTAACTGAATTATTTTTTAAATTAAGCAG TTCTACTCGATCACCAAGATGCTTCTGAAAATTGCATTTTATTACCATTTCAAACTATTTTTTAAAAAATAAATAC AGTTAACATAGAGTGGTTTCTTCATTCATGTGAAAATTATTAGCCAGCACCAGATGCATGAGCTAATTATCTCTT TGAGTCCTTGCTTCTGTTTGCTCACAGTAAGCTCATTGTTTAAAAGCTTC

1393/2682 FIGURE 1262

MESYSVTQAGVQWHELCSLQPSPPRFREMCIEQDGRVHLTVVYFGKEEINEVKGVLENTSKAANFRNFTFIQLNG EFSRGKGLDVGARFWKGSNVLLFFCDVDIYFTSEFLNTCRLNTQPGKKVFYPVLFSQYNPGIIYGHHDAVPPLEQ QLVIKKETGFWRDFGFGMTCQYRSDFINIGGFDLDIKGWGGEDVHLYRKYLHSNLIVVRTPVRGLFHLWHEKRCM DELTPEQYKMCMQSKAMNEASHGQLGMLVFRHEIEAHLRKQKQKTSSKKT

1394/2682 FIGURE 1263

1395/2682 FIGURE 1264

1396/2682 FIGURE 1265

1397/2682 FIGURE 1266

MLLKEYRICMPLTVDEYKIGQLYMISKHSHEQSDRGEGVEVVQNEPFEDPHHGNGQFTEKRVYLNSKLPSWARAV VPKIFYVTEKAWNYYPYTITEYTCSFLPKFSIHIETKYEDNKGSNDTIFDSEAKDVEREVCFIDIACDEIPERYY KESEDPKHFKSEKTGRGQLREGWRDSHQPIMCSYKLVTVKSEVWGLQTRVEQFVHKVVRDILLIGHRQAFAWVDE WYDMTMDEVREFERATQEATNKKIGIFPPAISISSIPLLPSSVRSAPSSAPSTPLSTDAPEFLSVPKDRPRKKSA PETLTLPDPEKKATLNLPGMHSSDKPCRPKSE

1398/2682 FIGURE 1267

GGCCGGTAGCTGTTGCTGTTGGGGGACCCCCTCATTCCTGCCGCTGCCGTCCCTGCTGCCTCATTCG GAGTTCACCTGGGCTGCACCTCAGCCTGTGTGGCCGTCTATAAGGATGGCCGGGCTGGTGTGGTTGCAAATGATG CCGGTGACCGAGTTACTCCAGCTGTTGTTGCTTACTCAGAAAATGAAGAGATTGTTGGATTGGCAGCAAAACAAA GTAGAATAAGAAATATTTCAAATACAGTAATGAAAGTAAAGCAGATCCTGGGCAGAAGCTCCAGTGATCCACAAG CTCAGAAATACATCGCGGAAAGTAAATGTTTAGTCATTGAAAAAAATGGGAAATTACGATATGAAATAGATACTG CTGTATTGGGCTCAGATGCAAATGATGTAGTTATTACTGTCCCGTTTGATTTTGGAGAAAAAGCAAAAAAATGCCC TTGGAGAAGCAGCTAGAGCTGCTGGATTTAATGTTTTGCGATTAATTCACGAACCGTCTGCAGCTCTTCTTGCTT ATGGAATTGGACAAGACTCCCCTACTGGAAAAAGCAATATTTTGGTGTTTAAGCTTGGAGGAACATCCTTATCTC ATTTCACAGAAACCTTAGCACAGTATCTAGCTTCTGAGTTCCAAAGATCCTTCAAACATGATGTGAGAGGAAATG CGCGAGCCATGATGAAATTAACGAACAGTGCTGAAGTAGCGAAACATTCTTTGTCAACCTTGGGAAGTGCCAACT GTTTTCCTGACTCATTATATGAAGGGCAAGATTTTGATTGCAATGTGTCCAGAGCAAGATTTGAACTTCTTTGTT CTCCACTTTTAATAAGTGTTTAGAAGCAATCAGAGGACTCTTAGATCAAAATGGATTTACAGCAGATGATATCA ACAAGGTTGTCCTTTGTGGAGGGTCTTCTCGAATCCCAAAGCTACAGCAACTGATTAAAGATCTTTTCCCAGCTG TTGAGCTTCTCAATTCTATCCCTCCTGATGAAGTGATCCCTATTGGTGCAGCTATAGAAGCAGGAATTCTTATTG GGAAAGAAAACCTGTTGGTGGAAGACTCTCTTATGATAGAGTGTTCAGCCAGAGATATTTTAGTTAAGGGTGTGG ACGAATCAGGAGCCAGTAGATTCACAGTGCTGTTTCCATCAGGGACTCCTTTGCCAGCTCGAAGACAACACACAT TGCAAGCCCCTGGAAGCATATCTTCAGTGTGCCTTGAACTCTATGAGTCTGATGGGAAGAACTCTGCCAAAGAGG AAACCAAGTTTGCACAGGTTGTACTCCAGGATTTAGATAAAAAAGAAAATGGATTACGTGATATATTAGCTGTTC TTACTATGAAAAGGGATGGATCTTTACATGTGACATGCACAGATCAAGAAACTGGAAAATGTGAAGCAATCTCTA TTGAGATAGCATCT**TAG**TGTTTTAGAGAAATCAAGAATTTTTAAAAACAAGAATATCAACATTTGGTTTTGTGTA TAAGTGGTGTTTGTATTAAAATACTTTTTCAATGAACTGTATAAACTATGTTTTATTAAACTACAATATATCAGT AAAAAAAAAAAAA

1399/2682 FIGURE 1268

MAAIGVHLGCTSACVAVYKDGRAGVVANDAGDRVTPAVVAYSENEEIVGLAAKQSRIRNISNTVMKVKQILGRSS SDPQAQKYIAESKCLVIEKNGKLRYEIDTGEETKFVNPEDVARLIFSKMKETAHSVLGSDANDVVITVPFDFGEK QKNALGEAARAAGFNVLRLIHEPSAALLAYGIGQDSPTGKSNILVFKLGGTSLSLSVMEVNSGIYRVLSTNTDDN IGGAHFTETLAQYLASEFQRSFKHDVRGNARAMMKLTNSAEVAKHSLSTLGSANCFPDSLYEGQDFDCNVSRARF ELLCSPLFNKCLEAIRGLLDQNGFTADDINKVVLCGGSSRIPKLQQLIKDLFPAVELLNSIPPDEVIPIGAAIEA GILIGKENLLVEDSLMIECSARDILVKGVDESGASRFTVLFPSGTPLPARRQHTLQAPGSISSVCLELYESDGKN SAKEETKFAQVVLQDLDKKENGLRDILAVLTMKRDGSLHVTCTDQETGKCEAISIEIAS

1400/2682 FIGURE 1269

AGAGAGGGGTGCAAGATCCTGATTTTTCAGGAGTTCAAGCGACAACCCCAGCACCAGGGGCCAGTTATGGGCCTGGAAGGCCAAGAGCCCAGAAATTCCCAATTGAGAATTGTGTTAG TGGGTAAAACCGGAGCAGGAAAAAGTGCAACAGGAAACAGCATCCTTGGCCGGAAAGTGTTTCATTCTGGCACTG CACCAGGCATTTTCGACACAGAGGTGCCCAATGCTGAAACGTCCAAGGAGATTATTCGCTGCATTCTTCTGACCT CCCCAGGGCCTCATGCTCTGCTTCTGGTGGTTCCACTGGGCCGTTACACTGAGGAAGAGCACAAAGCCACAGAGA AGATCCTGAAAATGTTTGGAGAGAGGGCTAGAAGTTTCATGATTCTCATATTCACCCGGAAAGATGACTTAGGTG ACACCAATTTGCATGACTACTTAAGGGAAGCTCCAGAAGACATTCAAGACTTGATGGACATTTTCGGTGACCGCT ACTGTGCGTTAAACAACAAGGCAACAGGCGCTGAGCAGGAGGCCCAGAGGGCACAGTTGCTGGGCCTGATCCAGC GCGTGGTGAGGGAGAACAAGGAAGGCTGCTACACTAATAGGATGTACCAAAGGGCGGAGGAGGAGATCCAGAAGC AGGAGGCTCACTATGCTGTAAGGCAGCAAAGGGCAAGAACGGAAGTGGAGAGTAAGGATGGGATACTTGAATTAA ${\tt TCATGACAGCGTTACAGATTGCTTCCTTTATTTTGTTACGTCTGTTCGCGGAAGAT\\ \underline{{\tt TAA}}{\tt ACTTAATGAAAATCTG}$ CAGAGAAAATGTATGCAAGAGACCAAAAAGATGGCTCCAAGCTATGTCATGTTACCTGTAATAAAATCTTTTCTT TTATCATTTGTTCATTGAAGAACAGAGACCTGTCTGGAAAATCGATCTCTACAAATTCAATTAAATAATGATCCC CAAATGCTGAAAAAGTGAAATACAGCAATTCAACAGATAATAGAGCAATGTTTAGTATATTCAGCTGTATCTGTA GCAACCTCACCTCCCTCACTCAACACTTTGAATACTTATTGTTTGGCAGGTCATCCACACACTTCTGCCCCCACT GCATTGAATTTTTTGCTTATGTTGTTTATAATAAAACTTTTCAATTATCTC

1401/2682 FIGURE 1270

MAAQYGSMSFNPSTPGASYGPGRQEPRNSQLRIVLVGKTGAGKSATGNSILGRKVFHSGTAAKSITKKCEKRSSS WKETELVVVDTPGIFDTEVPNAETSKEIIRCILLTSPGPHALLLVVPLGRYTEEEHKATEKILKMFGERARSFMI LIFTRKDDLGDTNLHDYLREAPEDIQDLMDIFGDRYCALNNKATGAEQEAQRAQLLGLIQRVVRENKEGCYTNRM YQRAEEEIQKQTQAMQELHRVELEREKARIREEYEEKIRKLEDKVEQEKRKKQMEKKLAEQEAHYAVRQQRARTE VESKDGILELIMTALQIASFILLRLFAED

1402/2682 FIGURE 1271

AGTCGCCTGGAAGCGTCCGCCCAAGGTCGCGGGCCCCTTGGGGAGTCAGCAGCGCGCCAGGCCCCTTCGGGCCCC ACGTGTTCCGGCCTCCGCTTCGCCGCTCCGAACCTCCTCGTCGTCGCCGCATTCGTCCACGCGGAGCCGG ${\tt CCGGGCAGGCAAGCGGCGCCTCCGCCATGAACCCCAGGGGCCTGTTCCAGGACTTCAACCCAGTAAGTTTCTCA}$ TCTACACCTGCCTGCTCTCTCGGTGCTGCTGCCCCTCCGCCTGGACGGCATCATCCAATGGAGCTACTGGG GCAACCCTCGCTACCGCACCGAGGGAGAGGCCTGTGTGGAGTTCAAAGCCATGCTGATCGCTGTGGGCATCCACC TGCTGCTGCTCATGTTCGAAGTCCTGGTCTGCGACAGGGTGGAGAGGGGCACCCACTTCTGGCTGCTGGTCTTCA TGCCTCTCTTCTTCGTGTCCCCGTGTCCGTGGCTGCCTGCGTCTGGGGCTTTCGACACGATAGGTCGCTGGAGC TGGAGATCCTGTGCTCGGTCAACATCCTGCAGTTCATCTTCATCGCCCTAAAGCTGGACAGGATTATTCACTGGC $\tt CGTGGCTGGTGGTGTTTGTGCCCTGTGGATCCTCATGTCGTTCCTTTGCCTGGTCGTCCTCTATTACATCGTCT$ GGTCCCTCCTGTTCCTGCGGTCCCTGGATGTGGTTGCCGAGCAGCGGAGAACACACGTGACCATGGCTATCAGTT GGATAACGATTGTCGTGCCTCTGCTCACTTTTGAGGTCCTGCTTGATCACAGATTGGATGGCCACAATACATTCT $\tt CCTACGTCTCCATATTTGTCCCCCTCTGGCTTTCCTTACTAACTTTAATGGCCACAACATTTAGGCGAAAGGGGGG$ GCAATCATTGGTGGTTTGGCATTCGCAGAGACTTCTGTCAGTTTCTGCTTGAAATTTTCCCATTTTTAAGAGAAT ATGGGAACATTTCATATGATCTCCATCACGAAGATAGTGAAGATGCTGAAGAAACATCAGTTCCAGAAGCTCCGA CCAAGTTAAATATTGATATGCCAGATTAAACTCCTAGAGAGGACCCAGGCACACAGACTCCACTTGGCCTTCG CCTCTTGTTCATTCATCCCAAACCTGGAAATGGAAACAGGCTTCAAACACTCGTCTCACGCCGTGTTTGAGATCA GAATAACCACACAGCTGTTTGTTTAAATGCTACTGTACCTATCAAAACTATTGTTTAAAAAGTATTTTTATACAC AAAAAA

1403/2682 FIGURE 1272

MLIAVGIHLLLMFEVLVCDRVERGTHFWLLVFMPLFFVSPVSVAACVWGFRHDRSLELEILCSVNILQFIFIAL KLDRIIHWPWLVVFVPLWILMSFLCLVVLYYIVWSLLFLRSLDVVAEQRRTHVTMAISWITIVVPLLTFEVLLVH RLDGHNTFSYVSIFVPLWLSLLTLMATTFRRKGGNHWWFGIRRDFCQFLLEIFPFLREYGNISYDLHHEDSEDAE ETSVPEAPKIAPIFGKKARVVITQSPGKYVPPPPKLNIDMPD

1404/2682 FIGURE 1273

1405/2682 FIGURE 1274

MLEPQENGVIDLPDYEHVEDETFPPFPPPASPERQDGEGTEPDEESGNGAPVPVPPKRTVKRNIPKLDAQRLISE RGLPALRHVFDKAKFKGKGHEAEDLKMLIRHMEHWAHRLFPKLQFEDFIDRVEYLGSKKEVQTCLKRIRLDLPIL HEDFVSNNDEVAENNEHDVTSTELDPFLTNLSESEMFASELSRSLTEEQQRRIERNKQLALERRQAKLLSNSQTL GNDMLMNTPRAHTVEEVNTDEDQKEESNGLNEDILDNPCNDAIANTLNEEETLLDQSFKNVQQQLDATSRNITEA

1406/2682 FIGURE 1275

GGCACGAGGCAGGCCAGGTGTGTGCGTCCGTCGGTCTTTCCGTGCCCACGCCGGAGACCAGCCCCGGAGGCCGCC TACGCCGTCCGCTCAGTTCCCCCGAAACGACGCGACCCTCAAGCGCTGTGGATTTTCGGGTACGGCTCCCTGGT GTGGAGGCCCGACTTCGCCTACAGCGACAGCCGTGTGGGCTTCGTGCGCGGCTACAGCCGCTTTCTGGCAGGG AGACACCTTCCATCGGGGCAGCGACAAGATGCCTGGCCGTGTGGTGACGCTCCTTGAAGATCATGAGGGCTGCAC TTGGGGCGTGGCATACCAAGTGCAAGGGGAGCAGGTAAGCAAGGCCCTGAAGTACCTGAATGTGCGAGAGGCAGT CTATGTGGCCACCCCACAGAACCCTGGTTACCTGGGCCCTGCGCCTGAAGAGGCCATTGCCACGCAGATCCTGGC CTGCCGGGGCTTCTCCGGCCACAACCTTGAATACTTGCTGCGTCTGGCAGACTTCATGCAGCTCTGTGGGCCTĆA ·GGCGCAGGACGAGCACCTGGCAGCCATCGTGGACGCTGTGGGCACCATGTTGCCCTGCTTCTGCCCCACCGAGCA GGCTCTGGCGCTGGTG<u>TGA</u>GGGGCTGAGCCCCTGCGGGGAGTGCTCATGTGGACATCAGGGCCAGACACCCACTC CCATGTTGGTGTGGGCAGGTGGAGGGCCTGCCCTGGACACAGGGGCCCTGCTGAGCAGTGGCCCCATCCTGG AACTTGACCAGATTCCCCCCAGTGCTGCTGCTAACCCCACACCACCCAGGCCTCCACCTCCCCAGGGAGTCTCCA AGAGCCTCGATCCTCTGCTCACTCAGCCCAGCCATCCATAGCCCTGGGAATTCCACCTGCCAAGGATCCCAGCAG GCTGGATGAGGGATAGTAGGGCATGAGGAGAAGGAGCCCTGTAAGGACTGAGGCCCCGGCCAGCCCTTCTCCTCC ACCAGTTCCCCAGAGCAGAGCTGGAGCTGATGCCTGGACACAGCTGCTGAGCCTGGGCCTCTTACCCACT TATTCCTGGGAAGCTCATCACTACAGGCCCTGGCAACCTTCCCAGTCTGTCCCATACTGTTACCCATAAAACTAT СТСТТТАААААААААААААААААА

1407/2682 FIGURE 1276

 $\label{thm:mkqesaapntpptsqsptpsaqfprndgdpqalwifgygslvwrpdfaysdsrvgfvrgysrrfwqgdtfhrgsd\\ KMPGRVVTLLEDHEGCTWGVAYQVQGEQVSKALKYLNVREAVLGGYDTKEVTFYPQDAPDQPLKALAYVATPQNP\\ GYLGPAPEEAIATQILACRGFSGHNLEYLLRLADFMQLCGPQAQDEHLAAIVDAVGTMLPCFCPTEQALALV$

1408/2682 FIGURE 1277A

TGAGGGAAGAAGAGGGAAGCGGGAGGAGCTTGGCTTCCTCGCGTATTTGAGGACAGCCCATCTCCCTTCAAGAACC CTCCGCGCGCCGGCTGCGGGCAGCGCTCCTGCTGTGGATTGTCAGCAGCTGCCTCTGCAGAGCCTGGACGGCTC CCTCCACGTCCCAAAAATGTGATGAGCCACTTGTCTCTGGACTCCCCCATGTGGCTTTCAGCAGCTCCTCCTA TCTCTGGTAGCTATTCTCCCGGCTATGCCAAGATAAACAAGAGAGGGGGGTGCTGGGGGGATGGTCTCCATCAGACA ATAGCAGCTCAGATTGGGTGACCCAATACCGGATGCTCTACAGCGACACAGGGAGAAACTGGAAACCCTATCATC AAGATGGGAATATCTGGGCATTTCCCGGAAACATTAACTCTGACGGTGTGGTCCGGCACGAATTACAGCATCCGA TTATTGCCCGCTATGTGCGCATAGTGCCTCTGGATTGGAATGGAAAGGTCGCATTGGACTCAGAATTGAAGTTT ATGGCTGTTCTTACTGGGCTGATGTTATCAACTTTGATGGCCATGTTGTATTACCATATAGATTCAGAAACAAGA AGATGAAAACACTGAAAGATGTCATTGCCTTGAACTTTAAGACGTCTGAAAGTGAAGGAGTAATCCTGCACGGAG AAGGACAGCAAGGAGATTACATTACCTTGGAACTGAAAAAAGCCAAGCTGGTCCTCAGTTTAAACTTAGGAAGCA ACCAGCTTGGCCCCATATATGGCCACACATCAGTGATGACAGGAAGTTTGCTGGATGACCACCACTGGCACTCTG TGGTCATTGAGCGCCAGGGGCGGAGCATTAACCTCACTCTGGACAGGAGCATGCAGCACTTCCGTACCAATGGAG AGTTTGACTACCTGGACTTGGACTATGAGATAACCTTTGGAGGCATCCCTTTCTCTGGCAAGCCCAGCTCCAGCA GTAGAAAGAATTTCAAAGGCTGCATGGAAAGCATCAACTACAATGGCGTCAACATTACTGATCTTGCCAGAAGGA AGAAATTAGAGCCCTCAAATGTGGGAAATTTGAGCTTTTCTTGTGTGGAACCCTATACGGTGCCTGTCTTTTTCA GGAACCCCAATGGTCTCCTGGTCTTCAGTCACTTTGCGGATAATTTGGGCAATGTGGAGATTGACCTCACTGAAA GCAAAGTGGGTGTTCACATCAACATCACACAGACCAAGATGAGCCAAATCGATATTTCCTCAGGTTCTGGGTTGA ATGATGGACAGTGGCACGAGGTTCGCTTCCTAGCCAAGGAAAATTTTGCTATTCTCACCATCGATGGAGATGAAG CATCAGCAGTTCGAACTAATAGTCCCCTTCAAGTTAAAACTGGCGAGAAGTACTTTTTTGGAGGTTTTCTGAACC AACTTGTAAATTTATACGAAGTGGCACAAAGGAAGCCGGGAAGTTTCGCGAATGTCAGCATTGACATGTGTGCGA TCATAGACAGATGTGTGCCCAATCACTGTGAGCATGGTGGAAAGTGCTCGCAAACATGGGACAGCTTCAAATGCA ACCTAGGACAGACATCAAATTATTACTGGATAGATCCTGATGGCAGCGGACCTCTGGGGGCCTCTGAAAGTTTACT GCAACATGACAGAGGACAAAGTGTGGACCATAGTGTCTCATGACTTGCAGATGCAGACGCCTGTGGTCGGCTACA ACCCAGAAAAATACTCAGTGACACAGCTCGTTTACAGCGCCTCCATGGACCAGATAAGTGCCATCACTGACAGTG CCGAGTACTGCGAGCAGTATGTCTCCTATTTCTGCAAGATGTCAAGATTGTTGAACACCCCAGATGGAAGCCCTT ACACTTGGTGGGTTGGCAAAGCCAACGAGAAGCACTACTACTGGGGAGGCTCTGGGCCTGGAATCCAGAAATGTG CCTGCGGCATCGAACGCAACTGCACAGATCCCAAGTACTACTGTAACTGCGACGCGGACTACAAGCAATGGAGGA AGGATGCTGGTTTCTTATCATACAAAGATCACCTGCCAGTGAGCCAAGTGGTGGTTGGAGATACTGACCGTCAAG GCTCAGAAGCCAAATTGAGCGTAGGTCCTCTGCGCTGCCAAGGAGACAGGAATTATTGGAATGCCGCCTCTTTCC CATTAACCCCCTGGGGAGTGTTTCTTGAAAATATGGGAAAGGAAGATTTCATCAAGCTGGAGCTGAAGTCTGCCA CAGAAGTGTCCTTTTCATTTGATGTGGGAAATGGGCCAGTAGAGATTGTAGTGAGGTCACCAACCCCTCTCAACG ATGACCAGTGGCACCGGGTCACTGCAGAGAGGAATGTCAAGCAGGCCAGCCTACAGGTGGACCGGCTACCGCAGC GCCAGCAGGGCTTCCTGGGCTGCATCCGCTCCTTGAGGATGAATGGGGTGACACTTGACCTGGAGGAAAGAGCAA AGGTCACATCTGGGTTCATATCCGGATGCTCGGGCCATTGCACCAGCTATGGAACAAACTGTGAAAATGGAGGCA AATGCCTAGAGAGATACCACGGTTACTCCTGCGATTGCTCTAATACTGCATATGATGGAACATTTTGCAACAAAG ATGTTGGTGCATTTTTTGAAGAAGGGATGTGGCTACGATATAACTTTCAGGCACCAGCAACAAATGCCAGAGACT CCAGCAGCAGAGTAGACAACGCTCCCGACCAGCAGAACTCCCACCCGGACCTGGCACAGGAGGAGATCCGCTTCA GCTTCAGCACCACCAAGGCGCCCTGCATTCTCCTCTACATCAGCTCCTTCACCACAGACTTCTTGGCAGTCCTCG TCAAACCCACTGGAAGCTTACAGATTCGATACAACCTGGGTGGCACCCGAGAGCCATACAATATTGACGTAGACC ACAGGAACATGGCCAATGGACAGCCCCACAGTGTCAACATCACCCGCCACGAGAAGACCATCTTTCTCAAGCTCG ATCATTATCCTTCTGTGAGTTACCATCTGCCAAGTTCATCCGACACCCTCTTCAATTCTCCCCAAGTCGCTCTTTC

1409/2682 FIGURE 1277B

TGGGAAAAGTTATAGAAACAGGGAAAATTGACCAAGAGATTCACAAATACAACACCCCAGGATTCACTGGTTGCC TCTCCAGAGTCCAGTTCAACCAGATCGCCCCTCTCAAGGCCGCCTTGAGGCAGACAAACGCCTCGGCTCACGTCC ACATCCAGGGCGAGCTGGTGGAGTCCAACTGCGGGGCCTCGCCGCTGACCCTCTCCCCCATGTCGTCCGCCACCG ACCCCTGGCACCTGGATCACCTGGATTCAGCCAGTGCGGATTTTCCATATAATCCAGGACAAGGCCAAGCTATAA GAAATGGAGTCAACAGAAACTCGGCTATCATTGGAGGCGTCATTGCTGTGGTGATTTTCACCATCCTGTGCACCC CAGAGAGCGCGGACGCCGCCATCATGAACAACGACCCCAACTTCACAGAGACCATTGATGAAAGCAAAAAGGAAT GGCTCATT<u>TGA</u>GGGGTGGCTACTTGGCTATGGGATAGGGAGGGAGGGAATTACTAGGGAGGAGAGAAAAGGGACAAA ATGGAATATTCTTGAGACTGATCACAAAAAAAAAAAACCTTTTTAATATTTCTTTATAGCTGAGTTTTCCCTT CTGTATCAAAACAAAATAATACAAAAAATGCTTTTAGAGTTTAAGCAATGGTTGAAATTTGTAGGTACTATCTGT CTTATTTTGTGTGTGTTTTAGAGGTGTTCTAAAGACCCGTGGTAACAGGGCAAGTTTTCTACGTTTTTAAGAGCCC CTTCTAGTCAACCTTAATGGGCTGTTACAGAAACTAGTTCGTGTTTATATACTATTTCCTTTGATGTCCTATAAG TCGGAAAAGAAGGGGCAAAGAGAACCTATTATTTGCCAGTTTTTAAGCAGAGCTCAATCTATGCCAGCTCTCTG AGCACAACTGGAGAGAGGCATTAAAGAACCAGGGAAGGTAGTTTGATTTTTCATTGAATTCTACAAGCTAATATT GTTCCACGTATGTAGTCTTAGACCAATAGCTGTAACTATCAGCTGCAATACCATGGTGACCAGCTGTTACAAAAG ATTTTTCCTGTTTTATCTGAAACATACTGGATTTATATATGTATAAGCGCCTCAATGGGGAATTAGAGCCAGAT GTTATGATTTGTTTGCTCTTTTTTTTTTTATAGTTATAGCAAAAATATGGATAATTTCTAGTGAATGCATAAATTA ${\tt GGTTGCGTTTCTTATTTTGCTTTAAATCTCTGGTAGTTTTTCCACCCCTGTGACACAATCCTAATAGACAGTGTC}$ CTGTAAATGGACACAACAATAAAGTCAAGTTATTATTGCTGTTACTCTGGATGATATGGAAAACACTGCCATA ACACATTTGAACCTCAGGTTCATCACAAACCTGGTACCTGTTGCTTCCCAGAGGATGGAGAAGTGTAGTTAATCA ATACACTTCCTGTAAACAAATGGGGACAATGCATCCAAAAAATCTTTTTAAACAGATTACACAAAAATTATTTCC AGAAAGGCTACCATTTATCATCATTATATTTCAAGCCTCTTATACTTAATAAGCACTTTCTAAAAAAGTCTTGAGA TCCCACCATTCTGAGGAATTCAATATGATCACTTTTTCCTTCTTTTGCCTGGGAGAGGTTAAGAGGCGGTTTCGAA GGTATAGATGCTATTGTTCTGATGGCCCGGCTGAATAAAATGGAAATTCTAGTTTGTTAGAATTATGCATTCTTT TTCAAGATTCTCAGTGTGCCTAACTTATTGGAGCACATCAGTTTCTTGGGTAATGGAAAACATTACCTAGAGTTG CCAGTGGCACATTACACCAGTACAGAGCACATTCCAAAGGAGACATTGGACCAGTTAATTCCCATACAAGTCAAG GTAACAGAACAAAAGGGAATCCTGATGCCCTTTTACCATTGCTGGTTGAGCTCAGGCACTGTCATGGACACCCTT **AATTTTAAAAGGTTTTAATCATTCTTCTATAAAATACATTTAAAATGGAAAAATACTTAATATCACTAAATATCA** GAACAATGTAACATTTACAAATGÀCATATTGAAAGCAAAGGCTGTTTTATTTAGCCAAGATGATTACCATTAGGA GTTACTTTATGTATTGTTGAAAGCAAATTTTAAACATGATGTTTTAGAAGTGTTTCTGATTTTTAAACCTGGTTT ACAGGTATTACTTCTGCACTTACCAAATAATGCCAGATGGAAATTTATTATTTCTTGCAATTCCCGTGATAGCTC TGTTCTTTATGCATTGTCTCAACACTTTCCCTTTTTTCCCAAAATGAGTAGAGAATTAAAGCCACCCAAAACAGC TTCTGCTACTAAAATGTTCTCATCCTTTCTCCTCCTCTCTTTTCCTGCCACAAAAGGTGAAAAATGAGATCCA ATCCTCTCACCAAAATTTCAAACCTAGGACACTGGAATGACTGCAGGGGATCAGTGGTTCTCCCATATCACCATCA ATTAAGACATATAGGACACTGTCTTCCTTCAAGAGGGTTACAATGTGGCCATCAGACAGGAAACCAAACGGTGGA TAAAGTATTAAGTAACTAAGTGCCAAATAAATGCTGGAAATCTTGACCTCTCCTTGGGATTATGGGTGTAACAAA **AATCCCTACATCTGTTTATGAAGGCCATATTCAGTACATTTTAAATGGTAAATAATCTGTTTATGTGAAGAAAAA** GAATTAAGTCTTTCTTCCAACTCTCTCTTGGATAGCCTAGCACAGTGCAGCCTCCATAACCATGACATTCCCGC ${\tt CCAAGCTCTCAGTGCCTAATCCTGCTTTGTCATTCACATCTCACAAAATCTTGACATCTTACATTCCAATACATT}$ ATCAAGCAAGCACAAGTATGCTGGTAGTAGCCTCTTTAAATAATATGTATAGACAACAACAACGACAAAAAAATAG ACTGTTTTAAAGTTTCAGGGAAAGTTGGTGGCTGATTTAAAGTTGTGCAGGAAACATCTTCTGTGTATGAAGCAA GCATATTCCCTAGAGCTCAAGAAAGCTGGTCCAGGAGGTTGAAAAAGCTATTTTGTTGTTAAATTATTTTCTGGC

FIGURE 1277C

1411/2682 FIGURE 1278

t MQAAPRAGCGAALLLWIVSSCLCRAWTAPSTSQKCDEPLVSGLPHVAFSSSSSISGSYSPGYAKINKRGGAGGWSPSDSDHYOWLOVDFGNRKOISAIATOGRYSSSDWVTOYRMLYSDTGRNWKPYHQDGNIWAFPGNINSDGVVRHEL QHPIIARYVRIVPLDWNGEGRIGLRIEVYGCSYWADVINFDGHVVLPYRFRNKKMKTLKDVIALNFKTSESEGVI LHGEGQQGDYITLELKKAKLVLSLNLGSNQLGPIYGHTSVMTGSLLDDHHWHSVVIERQGRSINLTLDRSMQHFR TNGEFDYLDLDYEITFGGIPFSGKPSSSSRKNFKGCMESINYNGVNITDLARRKKLEPSNVGNLSFSCVEPYTVP VFFNATSYLEVPGRLNQDLFSVSFQFRTWNPNGLLVFSHFADNLGNVEIDLTESKVGVHINITQTKMSQIDISSG SGLNDGQWHEVRFLAKENFAILTIDGDEASAVRTNSPLQVKTGEKYFFGGFLNQMNNSSHSVLQPSFQGCMQLIQ VDDQLVNLYEVAQRKPGSFANVSIDMCAIIDRCVPNHCEHGGKCSQTWDSFKCTCDETGYSGATCHNSIYEPSCE AYKHLGOTSNYYWIDPDGSGPLGPLKVYCNMTEDKVWTIVSHDLQMQTPVVGYNPEKYSVTQLVYSASMDQISAI TDSAEYCEOYVSYFCKMSRLLNTPDGSPYTWWVGKANEKHYYWGGSGPGIQKCACGIERNCTDPKYYCNCDADYK QWRKDAGFLSYKDHLPVSQVVVGDTDRQGSEAKLSVGPLRCQGDRNYWNAASFPNPSSYLHFSTFQGETSADISF YFKTLTPWGVFLENMGKEDFIKLELKSATEVSFSFDVGNGPVEIVVRSPTPLNDDQWHRVTAERNVKQASLQVDR LPQQIRKAPTEGHTRLELYSQLFVGGAGGQQGFLGCIRSLRMNGVTLDLEERAKVTSGFISGCSGHCTSYGTNCE NGGKCLERYHGYSCDCSNTAYDGTFCNKDVGAFFEEGMWLRYNFQAPATNARDSSSRVDNAPDQQNSHPDLAQEE IRFSFSTTKAPCILLYISSFTTDFLAVLVKPTGSLQIRYNLGGTREPYNIDVDHRNMANGQPHSVNITRHEKTIF LKLDHYPSVSYHLPSSSDTLFNSPKSLFLGKVIETGKIDQEIHKYNTPGFTGCLSRVQFNQIAPLKAALRQTNAS AHVHIQGELVESNCGASPLTLSPMSSATDPWHLDHLDSASADFPYNPGQGQAIRNGVNRNSAIIGGVIAVVIFTI LCTLVFLIRYMFRHKGTYHTNEAKGAESAESADAAIMNNDPNFTETIDESKKEWLI

1412/2682 FIGURE 1279

AAAAAACAACCATTTCCTCTCTGCTGAGAGCCAGGGAAGGCGAGCTCTGCGCACACGGGCGTCCCTGCAGCAGCC ACTCTGCTTTCCAGGACCGGCCAACTGCCCTGGAGGCATCCACACAGGGGCCCCAGGCAGCACAGAGGAGCTGTGA ACCCGCTCCACACCGGCCACCCTGCCCGGAGCCTGGCACTCACAGCAGGCCGGTGCTAAGGAGTGTGGCGCGGGC TCTAGCCACCCTAGCAGCGTCGGCTCTCCCTGGACGTGCGGCCGGGACTGGGACTTGGCTTTCTCCGGATAAG TCCTCAACAACGTGGCGGCCTTCACCTCCAACTGGGTGTGCCAGACGCTGGAGGATGGGCGCAGGCGCAGCGTGG GGCTGTGGAGGTCCTGCTGGCTGGACAGGACCCGGGGAGGGCCGAGCCCTGGGGGCCAGAGCCGGCCAGGTGG ACGCACATGACTGTGAGGCGCTGGGGCTGGGGCTCCGAGGCAGCCGGCTTCCAGGAGTCCCGAGGCACCGTCAAAC TGCAGTTCGACATGATGCGCGCCTGCAACCTGGTGGCCACGGCCGCGCTCACCGCAGGCCAGCTCACCTTCCTCC TGGGGCTGGTGGGCCTGCCCTGTCACCCGACGCCCCGTGCTGGAGGAGGACCATGGCCGCTGCATTCCAAC TGGCGAGTTTTGTCCTGGTCATCGGGCTCGTGACTTTCTACAGAATTGGCCATACACCAACCTGTCCTGGTCCTG $\verb|CTACCTGA| A CATTGGCGCCTGCCTTCTGGCCACGCTGGCGGCAGCCATGCTCATCTGGAACATTCTCCACAAGAG$ GGAGGACTGCATGGCCCCCGGGTGATTGTCATCAGCCGCTCCCTGACAGCGCGCTTTCGCCGTGGGCTGGACAA TGACTACGTGGAGTCACCATGCTGAGTCGCCCTTCTCAGCGTTCCATCGATGCACCACCTGCTATCGTGGAACAGC CTAGAAACCAAGGGACTCCACCACCAAGTCACTTCCCCTGCTCGTGCAGAGGCACGGGATGAGTCTGGGTGACCT $\tt CTGCGCCATGCGTGCGAGACACGTGTGCGTTTACTGTTATGTCGGTCATATGTCTGTACGTGTCGTGGGCCAACC$ TCGTTCTGCCTCCAGCTTTCCTGGTTAGCGCAACGCGGCTCCACGACCACACGCACTTCAGGGTGGAAGCTGGAA GCTGAGACACAGGTTAGGTGGCGCGAGGCTGCCCTGCGCTCTGCTTTGCTTTGGGATTAATTTATTCTGCATCTG CTGAGAGGGGCACCCCAGCCATATCTTACACTTTGGTAAAGCAGAAAACCAGGAAAATTTTCTTAAAATATCCAC AATATTCCTTGAGTGAGTCAGAATCTATAGCCGGTTAGTGATGGTTTCAGGCAGAATCGTGTTCGTGTCTGTTTT

FIGURE 1280

MTVQRLVAAAVLVALVSLILNNVAAFTSNWVCQTLEDGRRRSVGLWRSCWLVDRTRGGPSPGARAGQVDAHDCEA LGWGSEAAGFQESRGTVKLQFDMMRACNLVATAALTAGQLTFLLGLVGLPLLSPDAPCWEEAMAAAFQLASFVLV IGLVTFYRIGHTPTCPGPAT

1414/2682 FIGURE 1281

GCCCGCCCGCGCCCGACCAGCCCGGCCTCGGGCAGCCACTCACCGGTGTCCCCGTCCGCGTCCTCCTCCCCGG CTGCAGGAGCGCTGGCCGCGCGCGAACCCGAGTCCGGCGCACCGACGACGACGACCTCAACAGCGTGCTGGACTTC TTCTATTACCCCGAACCCGCCCCCCCCCCCCCACAGCGCCCCCGCGGGTGGCCTGGTGTCTGAGCTGCTGCGA GCCGAGCCCCTGAAGCGGACGGCGGCGGCGGCTACGGCTGCGCCCCCGGGCTGACCCGTGGACCGCGCGCCTC AAGCGCGAGGGCGCCCGGGCGGCTTCGTGCATGCGAGGTCCCGGGGGCCGCCCCCCCGCCGCCGAC GGTGAGAAGCCCTACCACTGCAACTGGGACGGCTGCGGCTGGAAGTTTGCGCGCTCAGACGAGCTCACGCGCCAC TACCGAAAGCACACGGCCACCGGCCATTCCAGTGCCATCTGTGCGATCGTGCCTTTTCGCGCTCCGATCACCTG ${\tt GCGCTGCACATGAAACGGCACATG{\color{red}{\textbf{TAG}}}{\tt CCGGGACGCCCCCCCCCCCCCGCCGGGGGCCGTGGCGGGTCCCACGCG}}$ $\tt CCGGGCGGCCCCCCCCAAACTGTGACTGGTATTTATTGGACCCAGAGAACCGGGCCGGGCACAGCGTGGCTA$ AAAAGACCACGATCCTCCTTGACGAGTTTTGTTTTTCAAAATGGTGCAATAATTTAAGTGGCATCTTCTCTCCCA $\tt CCGGGTCTACACTAGAGGATCGAGGCTTGTGATGCCTTGTGAGAAATAAGGGCCTTAATTTGTACTGTCTGCGGC$ ATTTTTTATAATATTGTATATAGTGACTGACAAATATTGTATTACTGTACATAGAGAGACAGGTGGGCATTTTTG

1415/2682 FIGURE 1282

MALSEPILPSFSTFASPCRERGLQERWPRAEPESGGTDDDLNSVLDFILSMGLDGLGAEAAPEPPPPPPPAFYY PEPGAPPPYSAPAGGLVSELLRPELDAPLGPALHGRFLLAPPGRLVKAEPPEADGGGGYGCAPGLTRGPRGLKRE GAPGPAASCMRGPGGRPPPPPDTPPLSPDGPARLPAPGPRASFPPPFGGPGFGAPGPGLHYAPPAPPAFGLFDDA AAAAAALGLAPPAARGLLTPPASPLELLEAKPKRGRRSWPRKRTATHTCSYAGCGKTYTKSSHLKAHLRTHTGEK PYHCNWDGCGWKFARSDELTRHYRKHTGHRPFQCHLCDRAFSRSDHLALHMKRHM

1416/2682 FIGURE 1283A

GGTCCCCGGCTGCCCGCAGCCCGCTCGCGGCGCTTCTCCGGCCCGGCTCCTTCTCCGCTCGTTAACGTCGCCAAC GGGAAAACTTCAAAGAGCCGGATCGCAGGCTCCCTGCCTACTCCCCCACCGGGGATTTCAGACTAGACGCTTGAA GCAAAGCTGCCATCCCAGAAGACGACATGCTCTCAGCAACCCCCCTGTATGGGAACGTTCACAGCTGGATGAACA GCGAGAGGGTCCGCATGTGTGGGGGGGAGCGAAGACAGGAAAATCCTTGTAAATGATGGTGACGCTTCAAAAGCCA GACTGGAACTGAGGGAAGAATCCCTTGAACCACAACGTGGTGGATGCGAGCACGGCCCATAGGATCGATGGCC TGGCAGCACTGAGCATGGACCGCACTGGCCTGATCCGGGAAGGGCTGCGGGTCCCGGGAAACATCGTCTATTCTA GCTTGTGTGGACTGGGCTCAGAGAAAGGTCGGGAGGCTGCCACAAGCACTCTAGGTGGCCTTGGGTTTTCTTCGG AAAGAAATCCAGAGATGCAGTTCAAACCGAATACACCCGAGACAGTGGAGGCTTCTGCCGTCTCTGGAAAACCCC CAAATGGCTTCAGTGCTATATACAAAACACCGCCTGGAATACAAAAAAGTGCTGTAGCCACAGCAGAAGCGCTGG GCTTGGACAGGCCTGCCAGCGACAAACAGAGCCCTCTCAACATCAATGGTGCTAGTTATCTGCGGCTGCCCTGGG TCAATCCTTACATGGAGGGTGCCACGCCAGCCATCTACCCTTTCCTCGACTCGCCAAATAAGTATTCACTGAACA TGTACAAGGCCTTGCTACCTCAGCAGTCCTACAGCTTGGCCCAGCCGCTGTATTCTCCAGTCTGCACCAATGGGG AGCGCTTTCTCTACCTGCCGCCACCTCACTACGTCGGTCCCCACATCCCATCGTCCTTGGCATCACCCATGAGGC TCTCGACACCTTCGGCCTCCCCAGCCATCCCGCCTCTCGTCCATTGCGCAGACAAAAGCCTCCCGTGGAAGATGG GCGTCAGCCCTGGGAATCCTGTTGATTCCCACGCCTATCCTCACATCCAGAACAGTAAGCAGCCCAGGGTTCCCT CTGCCAAGGCGGTCACCAGTGGCCTGCCGGGGGACACAGCTCTCCTGTTGCCCCCCTCGCCTCGGCCGTCACCCC GAGTCCACCTTCCCACCCAGCCTGCTGCAGACACCTACTCGGAGTTCCACAAGCACTATGCCAGGATCTCCACCT CTCCTTCAGTTGCCCTGTCAAAGCCATACATGACAGTTAGCAGCGAGTTCCCCGCGGCCAGGCTCTCCAATGGCA ACAGAAAAGACGGCAGCTCACCTCTCTTGGAGAAGCAGACCGTTACCAAAGACGTCACAGATAAGCCACTAG ACTTGTCTTCTAAAGTGGTGGATGTAGATGCTTCCAAAGCTGACCACATGAAAAAGATGGCTCCCACGGTCCTGG ATGGTTGTGCTATCTATAGATCTGAAATCATCAGCACTGCTCCCTCATCCTGGGTGGTGCCCGGGCCAAGTCCTA ACGAAGAGAACAATGGCAAAAGCATGTCGCTGAAAAACAAGGCATTGGACTGGGCGATACCACAGCAGCGGAGTT CATCATGCCCGCGCATGGGCGGCACCGATGCTGTCATCACTAACGTTTCAGGGTCAGTGTCGAGTGCAGGCCGCC CAGCCTCCGCATCACCCGCCCCCAATGCCAATGCAGATGGCACCAAAACCAGCAGGAGCTCTGTAGAAACCACAC CATCCGTTATTCAGCACGTGGGCCAGCCCCCGGCCACTCCTGCCAAGCACAGTAGCAGCACCAGCAGCAAGGGGCG CCAAAGCCAGCAACCCAGAACCGAGTTTCAAAGCAAACGAGAACGGCCTTCCACCAAGCTCTATATTTCTGTCTC CAAATGAGGCATTCAGGTCCCCACCAATTCCCTACCCCAGGAGTTACCTCCCTTACCCAGCCCCTGAGGGCATTG CTGTAAGTCCCCTCTCCTTACATGGCAAAGGACCTGTCTACCCTCACCCAGTTTTGTTACCCAATGGCAGTCTGT TTCCTGGGCACCTTGCCCCAAAGCCTGGGCTGCCCTATGGGCTTCCCACCGGCCGTCCAGAGTTTGTGACCTACC AAGATGCCCTGGGGTTGGGCATGGTGCATCCCATGTTGATACCACACGCCCCATAGAGATTACTAAAGAGGAGA AACCAGAGAGGAGATCCCGGTCCCATGAGAGAGCCCGTTACGAGGACCCAACCCTCCGGAATCGGTTTTCCGAGA TTTTGGAAACTAGCAGCACCAAGTTACATCCAGATGTCCCCACCGACAAGAACCTAAAGCCGAACCCCAACTGGA ATCAAGGGAAGACTGTTGTCAAAAGCGACAAGCTTGTCTACGTAGACCTTCTCCGAGAAGAACCAGATGCTAAAA CTGACACAAACGTGTCCAAACCCAGCTTTGCAGCAGAGAGTGTTGGCCAGAGCGCTGAGCCCCCAAGCCCTCAG AAACTTATACTTTCAAACAGCCAGTCTTCACCGTAAGCAAGGACAGTGTTCTGGCAGGTACCAACAAAGAGAACC TAGGGTTGCCAGTCTCGACTCCATTCCTGGAGCCACCTCTGGGGAGCGATGGCCCTGCTGTAACTTTTGGTAAAA CCCAAGAGGATCCCAAACCATTTTGTGTGGGCAGTGCCCCACCAAGTGTGGATGTGACCCCCACCTATACCAAAG ATGGAGCTGATGAGGCTGAATCAAATGATGGCAAAGTTCTGAAACCGAAGCCATCTAAGCTGGCAAAGAGAATCG CCAACTCAGCGGGTTACGTGGGTGACCGATTCAAATGTGTCACTACCGAACTGTATGCAGATTCCAGTCAGCTCA GCCGGGAGCAACGGGCATTGCAGATGGAAGGATTACAAGAGGACAGTATTTTATGTCTACCCGCTGCTTACTGTG AGCGTGCAATGATGCGCTTCTCAGAGTTGGAGATGAAAGAAGAAGAGGTGGCCACCCAGCAACCAAAGACTCCG AGATGTGCAAATTCAGCCCAGCCGACTGGGAAAGGTTGAAAGGAAATCAGGACAAAAAGCCAAAGTCGGTCACCC TGGAGGAGGCCATTGCAGAACAGAACGAAAGTGAGAGATGCGAGTATAGTGTTGGAAACAAGCACCGTGATCCCT

1417/2682 FIGURE 1283B

CAGACCAGGTGGCCTCGGACATGCCTCACAGCCCCACCCTCCGGGTGGACAGGAAACGCAAAGTCTCAGGTGACA GCAGCCACACTGAGACCACTGCGGAGGAGGTGCCAGAGGACCCTCTGCTGAAAGCCAAACGCCGACGAGTCTCTA AAGGGCTCCATCCTAAAAAACAACGCCACTTGCTGCACCTTAGAGAACGATGGGAGCAGCAGGTGTCGGCAGCAG ATGGCAAACCTGGCCGGCAAAGCAGGAAGGAAGTGACCCAGGCCACTCAGCCTGAGGCCATTCCTCAGGGGACTA ACATCACTGAAGAGAAACCTGGCAGGAAAAGGGCAGAGGCCAAAGGCAACAGAAGCTGGTCGGAAGAGTCTCTTA AACCCAGTGACAATGAACAAGGCTTGCCTGTGTTCTCCGGCTCTCCGCCCATGAAGAGTCTTTCATCCACCAGTG CAGGCGGCAAAAAGCAGGCTCAGCCAAGCTGCGCACCAGCCTCCAGGCCGCCAAACAGCAGAAAATTAAAG AAAACCAGAAGACAGATGTGCTGTGTGCAGACGAAGAAGAGGATTGCCAGGCTGCCTCCCTGCTGCAGAAATACA CCGACAACAGCGAGAAGCCATCCGGGAAGAGACTGTGCAAAACCAAACACTTGATCCCTCAGGAGTCCAGGCGGG GATTGCCACTGACAGGGGAATACTACGTGGAGAATGCCGATGGCAAGGTGACTGTCCGGAGATTCAGAAAGCGGC CGGAGCCCAGTTCGGACTATGATCTGTCACCAGCCAAGCAGCCAAAGCCCTTCGACCGCTTGCAGCAACTGC TACCAGCCTCCCAGTCCACACAGCTGCCATGCTCAAGTTCCCCTCAGGAGACCACCCAGTCTCGCCCT**ATG**CCGC CGGAAGCACGGAGACTTATTGTCAATAAGAACGCTGGCGAGACCCTTCTGCAGCGGGCAGCCAGGCTTGGCTATG AGGAAGTGGTCCTGTACTGCTTAGAGAACAAGATTTGTGATGTAAATCATCGGGACAACGCAGGTTACTGCGCCC TGCATGAAGCTTGTGCTAGGGGCTGGCTCAACATTGTGCGACACCTCCTTGAATATGGCGCTGATGTCAACTGTA GTGCCCAGGATGGAACCAGGCCTCTGCACGATGCTGTTGAGAACGATCACTTGGAAATTGTCCGACTACTTCTCT CTTATGGTGCTGACCCCACCTTGGCTACGTACTCAGGTAGAACCATCATGAAAATGACCCACAGTGAACTTATGG AAAAGTTCTTAACAGATTATTTAAATGACCTCCAGGGTCGCAATGATGATGACGCCAGTGGCACTTGGGACTTCT ATGGCAGCTCTGTTTGTGAACCAGATGATGAAAGTGGCTATGATGTTTTAGCCAACCCCCCAGGACCAGAAGACC AGGATGATGACGATGCCTATAGCGATGTGTTTGAATTTTGAATTTTCAGAGACCCCCCTCTTACCGTGTTATA ACATCCAAGTATCTGTGGCTCAGGGGCCACGAAACTGGCTACTGCTTTCGGATGTCCTTAAGAAATTGAAAATGT CCTCCCGCATATTTCGCTGCAATTTTCCAAACGTGGAAATTGTCACCATTGCAGAGGCAGAATTTTATCGGCAGG TTTCTGCAAGTCTCTTGTTCTCTTGCTCCAAAGACCTGGAAGCCTTCAACCCTGAAAGTAAGGAGCTGTTAGATC TGGTGGAATTCACGAACGAAATTCAGACTCTGCTGGGCTCCTCTGTAGAGTGGCTCCACCCCAGTGATCTGGCCT CAGACAACTACTGGTGAGCAAGCTGGACCCACCATGTACAGTGTTATAGTGTTAATCCTTGTGCATATGTGTC ATAATACAACTATTTCTGTAAAGAAAGGACACTATTACATATGAAAATATCTCTTCTTTATATAAGAGAAATTAC TCCAGTCAGAAGGACTTAGAAACATGTTTTTTTCCTTTTAAACTTTTAAGTCAGTTTTTATGAAGTTGTTATAAT TTAAGGAGAAAAAAATGAGTAAAAGGAGCTCCACACTTTGACTTAATTTCATACAAAGCTCTGATGACAGGCC ATGACTGTAGAGTGGTCAGAACTGTGGGTTGGTTTGAGGGAGCGAATTCGGGGAAGGCACTTGGTGATATAACT TTGTTTTGTTTACAGAGTACCTGCTCGGGCCAGGTAAATGCTATTGGATGTAATCCAGTAGTGTGTAATATAAAT TCAAACCATATCCACACACAACAACTAATTGTATGAAACTTTTATATCCTAATTTAAAAGCTGTGAAATTAGTTT TCACGCATCAAACCGGATTGTTTATATGTTTAAACATTTTATGCTCTTATTTAAAGAAGACTTTGAGCTATTTTT TTCTGTACCCTGTAAAATATTGAAAACTAACATAATATGTTGAGGTTGCTTGGAAATGTACATAAAACTAAAATT TTCTGAATCGTGAAAAAAAAAAAAAAAAAAAAAA

1418/2682 FIGURE 1284

MPPEARRLIVSKNAGETLLQRAARLGYEEVVLYCLENKICDVNHRDNAGYCALHEACARGWLNIVRHLLEYGADV NCSAQDGTRPLHDAVENDHLEIVRLLLSYGADPTLATYSGRTIMKMTHSELMERFLTDYLNDLQGRNDDDASGTW DFYGSSVCEPDDESGYDVLANPPGPEDQDDDDDAYSDVFEFEFSETPLLPCYNIQVSVAQG

1419/2682 FIGURE 1285

GGCACGAGGGCGGGTGGGAAGCCGTGTCTCGCAGTCGTGGACTCGTGCAGCTGGGGCGTCCGCAGCCGCTCGTCA CCCGCGTGATGCTGTTTCTGGCGTTGGGCAGCCCGTGGGCGGTCGAACTGCCTCTCTGCGGAAGGAGGACTGCAT TGTGTGCGGCCGCGCCCCGAGGTCCCCGGGCCTCTGTCTCCCGGGCGTCCTCCAGCAGCGGGCCTTCGGGGC CGGTAGCCGGCTGGAGTACGGGGCCTTCGGGAGCCGCGCGCCTTCTCCGGCGTCCGGGTCGAGCGCAGATCCCTG TTTATTGGGAAGGATATGTTCGATTCTTAAATACGCCATCTGACAAATCAGAAGATGGAAGGCTAATTTATACTG ${\tt GCAAT} \underline{\textbf{ATG}} {\tt GCCCGAGCAGTGTTTGGTGTGAAATGTTTCTCTTATTCTACGAGTCTGATTGGCCTTACATTTCTGC}$ CATACATTTTTACACAAAATAATGCTATTTCTGAAAGTGTGCCTCTGCCTATTCAAATCATATTCTATGGCATCA TGGGAAGCTTTACGGTGATCACCCCAGTGCTTCACTTTATTACAAAAGGCTATGTCATTCGATTGTACCATG AGGCCACAACAGACACTTATAAAGCCATTACCTACAATGCTATGCTTGCAGAAACGAGTACAGTGTTTCACCAGA AAGAAACCAGTGAAGAGAAACGGCATAAAGATGACAAA<u>TGA</u>GCCTATTTGTTAGTGTTCGTGCTCAAATGTGATT TACGTTTTAATGTATAATAATAAATTGCCTTTTGCATTCCGTTAGTGACTGATTGTTAAAAAATAATTTGAAATT ATCAAAGCTTTTAATTTCCAGAGAATGATGTTTGTTTATAATAAAACAAGCTATGTTTGAAAAACAAATGTAGT ATCTACCATTCGTGTTTTAGAAAGGTATGTGAATAAATATGTTCATGCTAGTATAAGAGTTCTGTGTTACTGTGG TTGACTCTAAACTGGGGATCTGATGTCAGTAGCAAATGGGAGAGTTGCTTTATTCTTTGTGTATGGATTTTTCTA AGTGTATAAATATTTTCCGACATTAAAAGACATTTTCTCTTTGAGGAAGACACAGTCATAGGTGGTGCGGAGCTG TGGTCCACCTGCTCCTGACTCACTGCTCTTTGCTGTTGCCTGAGGACCAAGTCTGTCAGGAAGCTGGCT AGGAAGCCTTGCAGCAGCCATGGCTTTTAAACATACCAGAAAAACACCCCGTGGAGTCAGAGGTGGCAATTCACCG AATTCATATCACTCTAACGAGTTGCAACGTAAAATCCCTGGATAAGGTGTGTGCTGACTTGATCTGAGGAGCAAA GGAAAAGAATCAGTGAAAGGACCAGTTTGAATGCCTACCAAGACTTTGAGAATCACTACAAGAAAAACTTACGGT GAAGGTTCTAAGGCATGGGATCGTTTCCAGATGAGAATCCACAAGCGACTCATTGACTTGCGCAGTCCTCAGATA GTTAAGCAGATTACTTCCATCAGTATTGAGCCAGGAGTTGAGATGGAAGTCACCATTGCAAATGCTTAAGTCAAC TGTTTTCATAAATTGATTACCAGTTGTTAAAAAATTTTCAAAAAACCGCAAAATTTCAAGAAATTCACAAATTAT GGGAGCAGTTTTAAGTCTTCTTTGGTTCAGAACACAGGTTTTTGCCTAACCCCTGGCATGATTGCCCATAAGAAC ATACATGTACAGTTGAACTGGTGGTTAGCTATACGGGAAATGGTAAGTAGTGTTGTCTTCAGTATCTTAATTTGT TTCTGCAACTGTGCACTCCTCCCTTGGTGGCACCCTATGGGTGTAGGAAAACCACTGTTATTAAACAGGTGAAAA ATAAAAATTTTTCAAAAAAAAAAAAAAAAAAAAAAA

1420/2682 FIGURE 1286

 ${\tt MARAVFGVKCFSYSTSLIGLTFLPYIFTQNNAISESVPLPIQIIFYGIMGSFTVITPVLLHFITKGYVIRLYHEATTDTYKAITYNAMLAETSTVFHQNDVKIPDAKHVFTTFYAKTKSLLVNPVLFPNREDYIHLMGYDKEEFILYMEETSEEKRHKDDK$

FIGURE 1287A

TTGGGAAACCCCTACCTGTCTGTACCTGTAGGTCTTTTCTCTGGGGTCTGGAAGAAGAATCCTTCAATATCTTGC CTTCTGGTAATCTGAGAGCAGGGGGAGAAAAGGAAGATCAGAGTTCCACCCTTAAATCTGTAGGTTTTCACTCCC $\texttt{CCACTCTCCTTTGCAGTCCCGTGGAGTCTCCATCTGAGCCCTTTCCTAGTCCAGGCATCCCG} \underline{\textbf{ATG}} \texttt{TTGGTGGATG}$ AGGAGGAGCTGGCCAATGAGAGGCTCATGACGCTCAAAATCGCTGAGATGAAGGAGGCCATGAGGACCCTGATAT TCCCACCCAGCATGCACTTTTTCCAGGCCAAGCATCTCATTGAGAGAAGTCAAGTGTTTAATATTCTAAGGATGA ACAGGCCTCACTGCCACATCTGTTTCACCCCAAGGGGGGATCATGCAGTTCAGATTTGCTCACCCCAACTCCCCGTC CATCAGAAAATGTTCCAAGTGGATTCTGCTGGAGGATTATCGGAAGCGGGTGCAGAACGTCACTGAGTTTGATG ACAGCTTGCTGAGGAATTTCACTCTGGTGACCCAGCACCCGGAGGTGATTTACACAAAACCAAAATGTTGTCTGGT CGAAATTTGAAACCATCTTCTCACCATCTCTGGTCTCATCCATTACGCACCAGTGTTCAGAGACTATGTCTTCC GGAGCATGCAGGAGTTCTACGAGGACAACGTGCTCTACATGGAGATCAGAGCCAGGCTGCTGCCGGTGTATGAGC TCAGTGGAGAGCACCATGACGAAGAGTGGTCAGTGAAGACTTACCAGGAAGTAGCTCAGAAGTTTGTGGAAACTC ACCCTGAGTTTATTGGAATCAAAATCATTTATTCGGATCACAGATCCAAAGATGTGGCTGTCATCGCAGAATCCA TCCGAATGGCCATGGGGCTCCGAATCAAGTTCCCCACGGTGGTGGCAGGGTTTGACCTGGTGGGGCATGAGGACA CTGGCCACTCCTTGCGTGACTACAAGGAAGCTCTGATGATCCCCGCCAAGGATGGCGTTAAGCTGCCTTACTTCT TCCACGCCGGAGAAACAGACTGGCAGGGTACTTCCATAGACAGGAACATTCTGGATGCTCTGATGCTGAACACTA CCAGAATCGGCCATGGATTTGCTTTGAGCAAACACCCCGCAGTCAGGACTTACTCCTGGAAAAAAGGACATCCCCA TAGAAGTCTGTCCCATCTCTAACCAGGTGCTGAAACTGGTGTCTGACTTGAGGAACCACCCTGTAGCCACTCTGA TGGCCACTGGGCACCCCATGGTGATCAGCTCTGATGACCCAGCTATGTTTTGGTGCCAAAGGCTTGTCCTATGATT TCTATGAGGTCTTCATGGGCATTGGGGGGATGAAGGCTGACCTGAGGACCCTCAAACAGCTGGCCATGAACTCTA TCAAGTACAGTACCCTGTTGGAGAGTGAGAAAAATACTTTCATGGAAAATCTGGAAGAAGAGAGATGGGATAAGTTCA ${\tt TAGCAGATGTGGCTACAAAG} \underline{{\tt TGA}}{\tt GGAGAAGCTAGCCAGCCCTCTACAAGCTGTCTTCTTGCACACGCTGTCACTT}$ CCTCTCACTCGTTCTTGAATCAGCTCCATGTGCCCATGAAATCAATGGCCTCTGTATGGAGCGACCCTGTGAGAA GTTTTGCTCTTGTTGCCCAGGCTGGAGTACAATGGTGCGATCTCAGCTCAGTGCAACCTCCGCCACCCGGGTTCA GGCAATTCTCTTGCATCAGCCTCCCGAGTAGTTGGAATTATAGGCATGTGCCACCACACCCAGCTGATTTTTGCA TTTTTAGTAGAGACAGGTTTTCACCATGTTGGCGAGCTGGTATCCAACTCTTGACCTCAGGTGATCCACTCGCCC CTTGGCTCCCAAAGTGCTGGAATTACAGGCGTTAGCCACCATGCCTGGCCTATTCTGGTCTCTTTAACTCTCTCC TCTTTATTTCTCTTCTCTCTCTGTACACTTTTCCTGGGTGGTCTCATCCATTCCTTTGCTTTTCATACCATTTA TTTGTTAATGATTCCCACATTTATTTATGCACTTGGAGAGCTCACAGGAATCTCAGAAACTGATGAGGTACAATT CTGAACCCTCAGTCTCTCCCTTTAAACCTTTCTTTTTCTCTACTTTAATTTTTCTAAAGAGTGTCTTGCTATGT TGCCCAGGCTGGTCTCCAACTCAAGTGATCCTCCTGCCGCAGTCTCCCGAAGTGCTGGGATTACTGACATGAGCC GTTGCTCAAAGCAGAAATTTTCAGTGCAAGTCTTGATGCTGCGCCGTCCCCACTCCCTACATCAGAACGCATCC CTCATCTGGACTCCAGCGGTGGCTTCTTGATGCTGCGCGGTCCCCCACTCCCTACATCAGAATGCATCCCGCATC AACAGCCTCCTCACTGATCTCCCCTTTCTTCCCTTTGCCTCCCAGCTCATTTTTCACAGTGTAGAATGACATT TTGTTTGTTTGTTTTGTTTGAGATGGAGTCTCGTTCTGTTGCCCAGGGTGGAGTGCAGCGGTGCGATCTC GGCTCACTGCAACTTCCACTCCCGGGTTCAAGCGGATTCTCGTGCCTCAGCCTCCTGAGTAGCTGGGATTACAGG CATGCACCACCATGCCCGGATAATTTTTGTATTTTTAGTAGAGATGGGGTTTCACTATGTTGGCCAGGCTGGTCT CGAACACCTGACTTCGTGGTCCACCCGCCTTCGGCCTCCCAAAGCACTGGGATTACAGGCGTGAGCCACCCGGCC TGGCCTAGAATGACTTTTAAAAGATCAAATTAAATCAGGTCACTCCTTTGCTTACAACGCAGTGCGTTTAGAGGT ACACCCCATGTCTCCACAGGGCATACAGCATCCGATTTAATCTGGATCCATTCCGGCGCTTCCTCTCCCAGTCAC CCAGAGGGCCCCAACCCCGGCGCCCTTTCTTCCTCAAATGTCCTCGGCTCTATACCGTGCCTGGGTCTTTTCTC

1422/2682 FIGURE 1287B

1423/2682 FIGURE 1288

MLVDGPSERPALCFLLLAVAMSFFGSALSIDETRAHLLLKEKMMRLGGRLVLNTKEELANERLMTLKIAEMKEAM RTLIFPPSMHFFQAKHLIERSQVFNILRMMPKGAALHLHDIGIVTMDWLVRNVTYRPHCHICFTPRGIMQFRFAH PTPRPSEKCSKWILLEDYRKRVQNVTEFDDSLLRNFTLVTQHPEVIYTNQNVVWSKFETIFFTISGLIHYAPVFR DYVFRSMQEFYEDNVLYMEIRARLLPVYELSGEHHDEEWSVKTYQEVAQKFVETHPEFIGIKIIYSDHRSKDVAV IAESIRMAMGLRIKFPTVVAGFDLVGHEDTGHSLRDYKEALMIPAKDGVKLPYFFHAGETDWQGTSIDRNILDAL MLNTTRIGHGFALSKHPAVRTYSWKKDIPIEVCPISNQVLKLVSDLRNHPVATLMATGHPMVISSDDPAMFGAKG LSYDFYEVFMGIGGMKADLRTLKQLAMNSIKYSTLLESEKNTFMEIWKKRWDKFIADVATK

1424/2682 FIGURE 1289

1425/2682 FIGURE 1290

 $\begin{tabular}{l} MVLLLKGVPFTLTTVDTRRSPDVLKDFAPGSQLPILLYDSDAKTDTLQIEDFLEETLGPPDFPSLAPRYRESNTA\\ GNDVFHKFSAFIKNPVPAQDEALYQQLLRALARLDSYLRAPLEHELAGEPQLRESRRRFLDGDRLTLADCSLLPK\\ LHIVDTVCAHFRQAPIPAELRGVRRYLDSAMQEKEFKYTCPHSAEILAAYRPAVHPR \end{tabular}$

1426/2682 FIGURE 1291

1427/2682 FIGURE 1292

MSEWMKKGPLEWQDYIYKEVRVTASEKNEYKGWVLTTDPVSANIVLVNFLEDGSMSVTGIMGHAVQTVETMNEGD HRVREKLMHLFTSGDCKAYSPEDLEERKNSLKKWLEKNHIPITEQGDAPRTLCVAGVLTIDPPYDPENCSSSNEI ILSRVQDLIEGHLTASQ

1428/2682 FIGURE 1293

1429/2682 FIGURE 1294

MGLPVSWAPPALWVLGCCALLLSLWALCTACRRPEDAVAPRKRARRQRARLQGSATAAEASLLRRTHLCSLSKSD
TRLHELHRGPRSSRALRPASMDLLRPHWLEVSRDITGPQAAPSAFPHQELPRALPAAAATAGCAGLEATYSNVGL
AALPGVSLAASPVVAEYARVQKRKGTHRSPQEPQQGKTEVTPAAQVDVLYSRVCKPKRRDPGPTTDPLDPKGQGA
ILALAGDLAYQTLPLRALDVGSGPLENVYESIRELGDPAGRSSTCGAGTPPASSCPSLGRGWRPLPASLP

1430/2682 FIGURE 1295

GGCGGCAGAACCATGTTGGACTTCGCGATCTTCGCCGTTACCTTCTTGCTGGCGTTGGTGGGAGCCGTGCTCTAC CTCTATCCGGCTTCCAGACAAGCTGCAGGAATTCCAGGGATTACTCCAACTGAAGAAAAAGATGGTAATCTTCCA GATATTGTGAATAGTGGAAGTTTGCATGAGTTCCTGGTTAATTTGCATGAGAGATATGGGCCTGTGGTCTCCTTC TGGTTTGGCAGGCGCGTCGTGGTTAGTTTGGGCACTGTTGATGTACTGAAGCAGCATATCAATCCCAATAAGACA ATGAGGAAAAATTGTATGAAAATGGTGTGACTGATTCTCTGAAGAGTAACTTTGCCCTCCTAAAGCTTTCA GCTATGAAGTCTGTTACACAGATGGTAATGGGTAGTACATTTGAAGATGATCAGGAAGTCATTCGCTTCCAGAAG TCAACATATTTCATTGACTCCTTAGTACAAGGGAACCTTAATGACCAACAGATCCTAGAAGACAGTATGATATTT TCTCTGGCCAGTTGCATAATAACTGCAAAATTGTGTACCTGGGCAATCTGTTTTTTAACCACCTCTGAAGAAGTT CAAAAAAAATTATATGAAGAGATAAACCAAGTTTTTGGAAATGGTCCTGTTACTCCAGAGAAAATTGAGCAGCTC AGATATTGTCAGCATGTGCTTTGTGAACTGTTCCGAACTGCCAAACTGACTCCAGTTTCTGCCCAGTTTCAAGAT ATTGAAGGAAAAATTGACCGATTTATTATTCCTAGAGAGACCCTCGTCCTTTATGCCCTTGGTGGTACTTCAG TCCTCACTTGGATTCTCAGGCACACAGGAGTGTCCAGAGTTGAGGTTTGCATATATGGTGACCACAGTACTTCTT AGTGTATTGGTGAAGAGACTGCACCTACTTTCTGTGGAGGGACAGGTTATTGAAACAAAGTATGAACTGGTAACA ${\tt TCATCAAGGGAAGAAGCTTGGATCACTGTCTCAAAGAGATAT} \underline{{\tt TAA}}{\tt AATTTTATACATTTAAAATCATTGTTAAAT$ TGATTGAGGAAAACAACCATTTAAAAAAAATCTATGTTGAATCCTTTTATAAACCAGTATCACTTTGTAATATAA ${\tt ACACCTATTTGTACTTAATTTTGTAAATTTGGATTTTTATATATCATATTTCTTAATTCATTGGACACATTTGA}$ $\tt CTTACTGCACAGTATATTGATCATTTTAATGGGAAACTTTAGCTTTCTACTTTTTAATTTTGGTTTTTCACTTTC$ TATGCCATTATTTTTGGATTCTTTTCTTAGTGTGAGCTCTAAAATCAATGTTCTTGAAAAAGAAATTATTTTGA ΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑ

1431/2682 FIGURE 1296

MLDFAIFAVTFLLALVGAVLYLYPASRQAAGIPGITPTEEKDGNLPDIVNSGSLHEFLVNLHERYGPVVSFWFGR RVVVSLGTVDVLKQHINPNKTLDPFETMLKSLLRYQSGGGSVSENHMRKKLYENGVTDSLKSNFALLLKLSEELL DKWLSYPETQHVPLSQHMLGFAMKSVTQMVMGSTFEDDQEVIRFQKNHGTPSCNWSLFKEHHKRTKRKELQSTYF IDSLVQGNLNDQQILEDSMIFSLASCIITAKLCTWAICFLTTSEEVQKKLYEEINQVFGNGPVTPEKIEQLRYCQ HVLCELFRTAKLTPVSAQFQDIEGKIDRFIIPRETLVLYALGVVLQDPNTWPSPHKFDPDRFDDELVMKTFSSLG FSGTQECPELRFAYMVTTVLLSVLVKRLHLLSVEGQVIETKYELVTSSREEAWITVSKRY

FIGURE 1297A

GTGGGATAAAGGAATGAGGTTCAGAAAGGGGCAGGGAGTTGCCCGCAGCCGCACCGCACGTCTTCAGCCCGACCG TTGTCCTGACCTCTCTGTCCCGTCCCCTGCCCAGTCTCACCATCGCCTTCTGGACACAGCTGATGCTGCTCT GGAAGAATTTCATGTATCGCCGGAGACAGCCGGTCCAGCTCCTGGTCGAATTGCTGTGGCCTCTTCTTCTTCT TCATCCTGGTGGCTGTTCGCCACTCCCACCCGCCCCTGGAGCACCATGAATGCCACTTCCCAAACAAGCCACTGC CATCGGCGGGCACCGTGCCCTGGCTCCAGGGTCTCATCTGTAATGTGAACAACACCTGCTTTCCGCAGCTGACAC CGGGCGAGGAGCCCGGGCGCCTGAGCAACTTCAACGACTCCCTGGTCTCCCGGCTGCTAGCCGATGCCCGCACTG TGCTGGGAGGGCCAGTGCCCACAGGACGCTGGCTGGCCTAGGGAAGCTGATCGCCACGCTGAGGGCTGCACGCA GCACGGCCCAGCCTCAACCAACCAAGCAGTCTCCACTGGAACCACCCATGCTGGATGTCGCGGAGCTGCTGACGT CACTGCTGCGCACGGAATCCCTGGGGTTGGCACTGGGCCAAGCCCAGGAGCCCTTGCACAGCTTGTTGGAGGCCG GGACCAGCGGCCCCTGGAGTTGCTGTCAGAGGCCCTCTGCAGTGTCAGGGGACCTAGCAGCACAGTGGGCCCCT $\verb|CCCTCAACTGGTACGAGGCTAGTGACCTGATGGAGCTGGTGGGGCAGGAGCCAGAATCCGCCCTGCCAGACAGCA|\\$ GCCTGAGCCCCGCCTGCTCGGAGCTGATTGGAGCCCTGGACAGCCACCCGCTGTCCCGCCTGCTCTGGAGACGCC TGAAGCCTCTGATCCTCGGGAAGCTACTCTTTGCACCAGATACACCTTTTACCCGGAAGCTCATGGCCCAGGTCA ACCGGACCTTCGAGGAGCTCACCCTGCTGAGGGATGTCCGGGAGGTGTGGGAGATGCTGGGACCCCGGATCTTCA CCAGACCTGGAGGCCGGGACCACATGGAGGCCCTGCGATCCTTTCTGGACCCTGGGAGCGGTGGCTACAGCTGGC AGGACGCACACGCTGATGTGGGGCACCTGGTGGGCACGCTGGGCCGAGTGACGGAGTGCCTGTCCTTGGACAAGC TGGAGGCGGCACCCTCAGAGGCAGCCCTGGTGTCGCGGGGCCCTGCAACTGCTCGCGGAACATCGATTCTGGGCCG GCGTCGTCTTCTTGGGACCTGAGGACTCTTCAGACCCCACAGAGCACCCCAGACCTGGGCCCCGGCCACG TGCGCATCAAAATCCGCATGGACATTGACGTGGTCACGAGGACCAATAAGATCAGGGACAGGTTTTGGGACCCTG GCCCAGCCGCGGACCCCTGACCGACCTGCGCTACGTGTGGGGCGGCTTCGTGTACCTGCAAGACCTGGTGGAGC ATGTGGACGACGTGTTCCTGCGTGTGCTGAGCCGGTCGCTGCCGCTCTTCCTGACGCTGGCCTGGATCTACTCCG TGACACTGACAGTGAAGGCCGTGGTGCGGGAGAAGGAGACGCGGCTGCGGGACACCATGCGCGCCATGGGGCTCA GCCGCGCGGTGCTCTGGCTAGGCTGGTTCCTCAGCTGCCTCGGGCCCTTCCTGCTCAGCCCCCACTGCTGGTTC TGGTGCTCAAGCTGGGAGACATCCTCCCCTACAGCCACCCGGGCGTGGTCTTCCTGTTCTTGGCAGCCTTCGCGG TGGCCGCGAGCCTGCTGTCGCCCGTGGCCTTCGGCTTCGGCTGCGAGAGCCTGGCTCTGCTGGAGGAGCAGGGCG AGGGCGCGCAGTGGCACAACGTGGGCACCCGGCCTACGGCAGACGTCTTCAGCCTGGCCCAGGTCTCTGGCCTTC TGCTGCTGGACGCGGCGCTCTACGGCCTCGCCACCTGGTACCTGGAAGCTGTGTGCCCAGGCCAGTACGGGATCC CTGAACCATGGAATTTTCCTTTTCGGAGGAGCTACTGGTGCGGACCTCGGCCCCCAAGAGTCCAGCCCCTTGCC CCACCCGCTGGACCCAAAGGTGCTGGTAGAAGAGGCACCGCCCGGCCTGAGTCCTGGCGTCTCCGTTCGCAGCC TGGAGAAGCGCTTTCCTGGAAGCCCGCAGCCCAGCCCTGCGGGGGCTCAGCCTGGACTTCTACCAGGGCCACATCA GTGGCTCTGCCTTCATCCTGGGCCACGACGTCCGCTCCAGCATGGCCGCCATCCGGCCCCACCTGGGCGTCTGTC CTCAGTACAACGTGCTGTTTGACATGCTGACCGTGGACGACGTCTGGTTCTATGGGCGGCTGAAGGGTCTGA GTGCCGCTGTAGTGGGCCCCGAGCAGGACCGTCTGCTGCAGGATGTGGGGCTGGTCTCCAAGCAGAGTGTGCAGA CTCGCCACCTCTCTGGTGGGATGCAACGGAAGCTGTCCGTGGCCATTGCCTTTGTGGGCGGCTCCCAAGTTGTTA TCCTGGACGAGCCTACGGCTGGCTGGATCCTGCTTCCCGCCGCGGTATTTGGGAGCTGCTGCTCAAATACCGAG AAGGTCGCACGCTGATCCTCTCCACCCACCACCTGGATGAGGCAGAGCTGCTGGGAGACCGTGTGGCTGGGTGG CAGGTGGCCGCTTGTGCTGCTGTGGCTCCCCACTCTTCCTGCGCCGTCACCTGGGCTCCGGCTACTACCTGACGC TGGTGAAGGCCCGCCTGCCCCTGACCACCAATGAGAAGGCTGACACTGACATGGAGGGCAGTGTGGACACCAGGC AGGAAAAGAATGGCAGCCAGGGCAGCAGAGTCGGCACTCCTCAGCTGCTGGCCCTGGTACAGCACTGGGTGC CCGGGGCACGGCTGGTGGAGGAGCTGCCACACGAGCTGGTGCTGGTGCCCTACACGGGTGCCCATGACGGCA GCTTCGCCACACTCTTCCGAGAGCTAGACACGCGGCTGGCGGAGCTGAGGCTCACTGGCTACGGGATCTCCGACA CCAGCCTCGAGGAGATCTTCCTGAAGGTGGTGGAGGAGTGTGCTGCGGACACAGATATGGAGGATGGCAGCTGCG

1433/2682 FIGURE 1297B

GGCAGCACCTATGCACAGGCATTGCTGGCCTAGACGTAACCCTGCGGCTCAAGATGCCGCCACAGGAGACAGCGC TGGAGAACGGGGAACCAGCTGGGTCAGCCCCAGAGACTGACCAGGGCTCTGGGCCAGACGCCGTGGGCCGGGTAC AGGGCTGGGCACTGACCCGCCAGCAGCTCCAGGCCCTGCTTCTCAAGCGCTTTCTGCTTGCCCGCCGCAGCCGCC GCGGCCTGTTCGCCCAGATCGTGCTGCCTCTTTTGTGGGCCTGGCCCTCGTGTTCAGCCTCATCGTGCCTC CTTTCGGGCACTACCCGGCTCTGCGGCTCAGTCCCACCATGTACGGTGCTCAGGTGTCCTTCTTCAGTGAGGACG CCCCAGGGGACCCTGGACGTGCCCGGCTGCTCGAGGCGCTGCTGCAGGAGGCAGGACTGGAGGAGCCCCCAGTGC AGCATAGCTCCCACAGGTTCTCGGCACCAGAAGTTCCTGCTGAAGTGGCCAAGGTCTTGGCCAGTGGCAACTGGA CAGCTGGTGGTCCCCCTCCGCCCCAGGCAGTGACCGGCTCTGGGGAAGTGGTTCAGAACCTGACAGGCCGGAACC TGTCTGACTTCCTGGTCAAGACCTACCCGCGCCTGGTGCGCCAGGGCCTGAAGACTAAGAAGTGGGTGAATGAGG TCAGGTACGGAGGCTTCTCGCTGGGGGGCCGAGACCCAGGCCTGCCCTCGGGCCAAGAGTTGGGCCGCTCAGTGG AGGAGTTGTGGGCGCTGCTGAGTCCCCTGCCTGGCGGGGCCCTCGACCGTGTCCTGAAAAACCTCACAGCCTGGG CTCACAGCCTGGACGCTCAGGACAGTCTCAAGATCTGGTTCAACAACAAAGGCTGGCACTCCATGGTGGCCTTTG TCAACCGAGCCAGCAACGCAATCCTCCGTGCTCACCTGCCCCAGGCCGGGCCCGCCACGCCCACAGCATCACCA CACTCAACCACCCCTTGAACCTCACCAAGGAGCAGCTGTTTGAGGCTGCATTGATGGCCTCCTCGGTGGACGTCC TCGTCTCCATCTGTGTGGTCTTTGCCATGTCCTTTGTCCCGGCCAGCTTCACTCTTGTCCTCATTGAGGAGCGAG TCACCCGAGCCAAGCACCTGCAGCTCATGGGGGGCCTGTCCCCCACCCTCTACTGGCTTGGCAACTTTCTCTGGG ACATGTGTAACTACTTGGTGCCAGCATGCATCGTGGTGCTCATCTTTCTGGCCTTCCAGCAGAGGGCATATGTGG CCCCTGCCAACCTGCCTGCTCCTGCTGTTGCTACTGTATGGCTGGTCGATCACACCGCTCATGTACCCAG CCTCCTTCTTCTCCCGTGCCCAGCACAGCCTATGTGGTGCTCACCTGCATAAACCTCTTTATTGGCATCAATG GAAGCATGGCCACCTTTGTGCTTGAGCTCTTCTCTGATCAGAAGCTGCAGGAGGTGAGCCGGATCTTGAAACAGG TCTTCCTTATCTTCCCCCACTTCTGCTTGGGCCGGGGGCTTATTGACATGGTGCGGAACCAGGCCATGGCTGATG TGGTGATACAGGGGCCCCTCTTCCTTCTCTCACACTACTGCTGCAGCACCGAAGCCAACTCCTGCCACAGCCCA GGGTGAGGTCTCTGCCACTCCTGGGAGAGGAGGACGAGGATGTAGCCCGTGAACGGGAGCGGGTGGTCCAAGGAG CCACCCAGGGGGATGTGTTGGTGCTGAGGAACTTGACCAAGGTATACCGTGGGCAGAGGATGCCAGCTGTTGACC GCTTGTGCCTGGGGATTCCCCCTGGTGAGTGTTTTGGGCTGCTGGGTGTGAATGGAGCAGGGAAGACGTCCACGT TTCGCATGGTGACGGGGGACACATTGGCCAGCAGGGGCGAGGCTGTGCTGGCAGGCCACAGCGTGGCCCGGGAAC CCAGTGCTGCGCACCTCAGCATGGGATACTGCCCTCAATCCGATGCCATCTTTGAGCTGCTGACGGGCCGCGAGC ACCTGGAGCTGCTTGCGCGCCTGCGCGGTGTCCCGGAGGCCAGGTTGCCCAGACCGCTGGCTCGGCCTGGCCG GTCTGGGACTCTCATGGTACGCAGACCGGCCTGCAGGCACCTACAGCGGAGGGAACAAACGCAAGCTGGCGACGG GCTTCCTTTGGAACAGCCTTTTGGCCGTGGTGCGGAGGGCCGTTCAGTGATGCTCACCTCCCATAGCATGGAGG AGTGTGAAGCGCTCTGCTCGCGCCTAGCCATCATGGTGAATGGGCGGTTCCGCTGCCTGGGCAGCCCGCAACATC TCAAGGGCAGATTCGCGGCGGGTCACACACTGACCCTGCGGGTGCCCGCCAAGGTCCCAGCCGGCAGCGGCCT TCGTGGCGGCCGAGTTCCCTGGGTCGGAGCTGCGCGAGGCACATGGAGGCCGCCTGCGCTTCCAGCTGCCGCCGG GAGGGCGCTGCGCCCTGGCGCGCTCTTTGGAGAGCTGGCGGTGCACGGCGCAGAGCACGCGTGGAGGACTTTT CCGTGAGCCAGACGATGCTGGAGGAGGTATTCTTGTACTTCTCCAAGGACCAGGGGAAGGACGAGGACACCGAAG AGCAGAAGGAGGCAGGAGTGGAGCCCCGCGCCAGGCCTGCAGCACCCCAAACGCGTCAGCCAGTTCCTCG AAGGGCAAGGTAGAGTGCCTAGGAGCCCTGGACTCAGGCTGGCAGAGGGGCTGGTGCCCTGGAGAAAATAAAGAG AAGGCTGGAGAGAAGCCGTGGTGGAAA

1434/2682 FIGURE 1298

MAFWTQLMLLLWKNFMYRRRQPVQLLVELLWPLFLFFILVAVRHSHPPLEHHECHFPNKPLPSAGTVPWLQGLIC NVNNTCFPOLTPGEEPGRLSNFNDSLVSRLLADARTVLGGASAHRTLAGLGKLIATLRAARSTAQPQPTKQSPLE PPMLDVAELLTSLIRTESLGLALGQAQEPLHSLLEAAEDLAQELLALRSLVELRALLQRPRGTSGPLELLSEALC SVRGPSSTVGPSLNWYEASDLMELVGQEPESALPDSSLSPACSELIGALDSHPLSRLLWRRLKPLILGKLLFAPD TPFTRKLMAQVNRTFEELTLLRDVREVWEMLGPRIFTFMNDSSNVAMLQRLLQMQDEGRRQPRPGGRDHMEALRS FLDPGSGGYSWQDAHADVGHLVGTLGRVTECLSLDKLEAAPSEAALVSRALQLLAEHRFWAGVVFLGPEDSSDPT EHPTPDLGPGHVRIKIRMDIDVVTRTNKIRDRFWDPGPAADPLTDLRYVWGGFVYLQDLVERAAVRVLSGANPRA GLYLQQMPYPCYVDDVFLRVLSRSLPLFLTLAWIYSVTLTVKAVVREKETRLRDTMRAMGLSRAVLWLGWFLSCL GPFLLSAALLVLVLKLGDILPYSHPGVVFLFLAAFAVATVTQSFLLSAFFSRANLAAACGGLAYFSLYLPYVLCV AWRDRLPAGGRVAASLLSPVAFGFGCESLALLEEQGEGAQWHNVGTRPTADVFSLAQVSGLLLLDAALYGLATWY LEAVCPGOYGIPEPWNFPFRRSYWCGPRPPKSPAPCPTPLDPKVLVEEAPPGLSPGVSVRSLEKRFPGSPQPALR GLSLDFYOGHITAFLGHNGAGKTTTLSILSGLFPPSGGSAFILGHDVRSSMAAIRPHLGVCPQYNVLFDMLTVDE HVWFYGRLKGLSAAVVGPEQDRLLQDVGLVSKQSVQTRHLSGGMQRKLSVAIAFVGGSQVVILDEPTAGVDPASRRGIWELLLKYREGRTLILSTHHLDEAELLGDRVAVVAGGRLCCCGSPLFLRRHLGSGYYLTLVKARLPLTTNEKA DTDMEGSVDTROEKKNGSQGSRVGTPQLLALVQHWVPGARLVEELPHELVLVLPYTGAHDGSFATLFRELDTRLA ELRLTGYGISDTSLEEIFLKVVEECAADTDMEDGSCGQHLCTGIAGLDVTLRLKMPPQETALENGEPAGSAPETD ${\tt QGSGPDAVGRVQGWALTRQQLQALLLKRFLLARRSRRGLFAQIVLPALFVGLALVFSLIVPPFGHYPALRLSPTM}$ YGAQVSFFSEDAPGDPGRARLLEALLQEAGLEEPPVQHSSHRFSAPEVPAEVAKVLASGNWTPESPSPACQCSQP GARRLLPDCPAAAGGPPPPQAVTGSGEVVQNLTGRNLSDFLVKTYPRLVRQGLKTKKWVNEVRYGGFSLGGRDPG LPSGOELGRSVEELWALLSPLPGGALDRVLKNLTAWAHSLDAQDSLKIWFNNKGWHSMVAFVNRASNAILRAHLP PGRARHAHSITTLNHPLNLTKEQLFEAALMASSVDVLVSICVVFAMSFVPASFTLVLIEERVTRAKHLQLMGGLS PTLYWLGNFLWDMCNYLVPACIVVLIFLAFQQRAYVAPANLPALLLLLLLYGWSITPLMYPASFFFSVPSTAYVV LTCINLFIGINGSMATFVLELFSDQKLQEVSRILKQVFLIFPHFCLGRGLIDMVRNQAMADAFERLGDRQFQSPL RWEVVGKNLLAMVIQGPLFLLFTLLLQHRSQLLPQPRVRSLPLLGEEDEDVARERERVVQGATQGDVLVLRNLTK VYRGQRMPAVDRLCLGIPPGECFGLLGVNGAGKTSTFRMVTGDTLASRGEAVLAGHSVAREPSAAHLSMGYCPQS DAIFELLTGREHLELLARLRGVPEAQVAQTAGSGLARLGLSWYADRPAGTYSGGNKRKLATALALVGDPAVVFLD EPTTGMDPSARRFLWNSLLAVVREGRSVMLTSHSMEECEALCSRLAIMVN

FIGURE 1299

1436/2682 FIGURE 1300

MGRLTEAAAAGSGSRAAGWAGSPPTLLPLSPTSPRCAATMASSDEDGTNGGASEAGEDREAPGKRRRLGFLATAW LTFYDIAMTAGWLVLAIAMVRFYMEKGTHRGLYKSIQKTLKFFQTFALLEIVHCLIGIVPTSVIVTGVQVSSRIF MVWLITHSIKPIQNEESVVLFLVAWTVTEITRYSFYTFSLLDHLPYFIKWARYNFFIILYPVGVAGELLTIYAAL PHVKKTGMFSIRLPNKYNVSFDYYYFLLITMASYIPLFPQLYFHMLRQRRKVLHGEVIVEKDD

FIGURE 1301A

GCTCGGAGCCATCCAGCGACCCGGCGACCGGCCTCAGGCCCCGCC<u>ATC</u>GGGAAGACCAACAGCAAGCTGGCCCCC GAGGTGCTGGAGGACCTTGTTCAGAACACTGAGTTCAGCGAGCAGGAGCTGAAGCAGTGGTACAAGGGCTTCCTG AAGGACTGCCCCAGCGGCATCCTCAACCTGGAGGAGTTTCAGCAGCTCTACATCAAGTTCTTCCCCTACGGCGAC GCCTCCAAGTTCGCGCAGCACGCTTTCCGCACCTTCGACAAGAACGGCGACGGCACCATCGACTTCCGGGAGTTC ATCTGCGCCCTGTCGGTCACCTCCCGCGGCAGCTTCGAGCAGAAGCTCAACTGGGCCTTTGAGATGTACGACCTG GACGGCGACGGGCGAATCACGCGCCTGGAGATGCTGGAGATCATCGAGGCAATCTACAAGATGGTGGGCACCGTG ATCATGATGCGCATGAACCAGGACGGCTCACGCCCCAGCAGCGTGTGGACAAGATCTTCAAGAAGATGGACCAG ${\tt CAGTGTGACATGCAGAAG{\color{red}{\bf TAG}} AAGCTGGTGAGGGGCAGGGTCCCTGGCCAGAAGGGGCCATGGCCACCTCCCAACC}$ CAAGCCCTTCCTCCCCTCCATCAAGATCTTTGAGGGACCACCTCACCCTGCAAAAGAGACAGGTCCTCCAGTACC CTGTCTTCTAGCCCCACCTCCCACTTGGCCAGAACCAATGTCCATTGGGCATAGGGGAGTTGGCTTTTGCCCCAG GAGGTGAGGTTAAGGAGTTGGGGGCCTGGGGTTCTGGTTAGGAATTCTCTTGATCCTGGGATTATGCTTTATAGG ATGTGGTCCCACAGGCCTGTCACAGGGCCAAATTGGGTCTGTCCATTCCTGAGGCTCCAGATCCCATAAAGGGGG AGCTAATGATTACTGAGCACCTGTTTGGTGCTAAGGATATGGTCATTTACAAGACACATCTTGTGCCCTCTGGAA GCTCATAGGGTTGTGAGGCAAACTTCCAGCCGTCAGGGTCTCAGCTAAGCAGAAGGTGCTGGAAGGCTGGTTAGT CTGGGAGGAGCTATTTCATCTTCCAGCTCAGCTCCACACAAAGCTGCAGAAGGACGAAATGAAAAGCATTTGGAA GTTTAGGAGCCACGTGAGTGAAAGTTTTAAGAAAAATGAAATTTATGTCATACTTATTTTTTTAGTACCCTTTAA AGGAGCTACAGTCATTTTATTATTTCAGGAGGTTAAAATATACTCTATATTACTTGGTTTATTATAAAATGATTA AATGAATAGAGAAAATATTAATTTTCAAGGGGAAAAAACCTGAGAAGAAAGGGGAGAAAAGACCATGAAATTTACC AGATAACACTTTTTAAGACTAAGTCCTGAGCTGCCACTCTCAGCAGTTTTTGCTGCTTCAGCTCTTCCTTTTTAT AAGCAAGGTTTGCAAAGAGTGAAACTAGTGTATATTCCGTATCTTGGTAGTTCTGGATTGGGTTTAGTTT CAGAACTGGACTTGTTCCTTCACTGCCACAGAATCAGAAAGAGCTAGAAGAAAAGGCTCACCTGGCCACTGTTTA GGCACCCAGACATAATTTATGGACGAAATGCCTAAAAATGTGCCAGGCATGCTCTGTTTGAGAGGCCTTTTTCTAA CCCCAAATCTTAGATCTGCCAGGTAGTTCAACATCTTCCAAGTGTGCTGGTTCTGCTTTCCAATGCCTGCTTCCC AATTTTGGATCCATGAGCTATACAGCTGCATGCTTTGACTGCCGGAAAAATTAATCTTGCTTCTTCATCAGGTCT TTCTCCTGTACTTGTGATCAGAAATTACCTTTGACGTGCAGTGACAGTTGATTTCCTCTTGAACTGCCGGTGAAA ACAGTCTAGTACACAGGTGCTGTCAGCCCAGGGTGGGAGCAGGAAATGATTGCTGAGCCCGGGGCAGGGGAATTG CATCTGCAGGAAAGAGATGCAGCATGCTCCTCACTCCTGAGTGCCCACCTGTCCTGCTTCTTCTGCAGGTGAAAAC TCTGGGGGATGCTGATCAATAGAGCTTGGTCCCAAGCTCTACTGGGCCCTTGGAGGTAGCAAGGCCACTGGGTTG $\verb|CTATCCTCTTGATGGGGATAGCAACCACTGGTTTGCAACCACTGGGTTGCTATCCTTTTGCTATCCTCTTGCTCA| \\$ TGCAAATGCTGAATCTAGCCTAATTCGCAACCACAGAATTTCATGGCTTTCAAAGGCTTGCCATGTGCCCCAT CTCATTCTATACTCACATCCCATGGAGGTGAGGATTTTCACTTCTTTTCTCTAGACTTGGAAGCTGAGATTCAGA GAGGAAGCATCCCTTGTGCAAGATCACATAGTCAGGAGGTGACACAGGGCTAAGACTTGAACCAAGGCTCTAAGA GGATTTCTTCTTTCAGAGTCTCTTCCCTGTCCATTTCTGTGACTAAGCTGTGCAGAGGTTGACAGCAGGGCAAG GCTTGGTTGAAGTCCCCACATTTTCAAGCACTCAGTGTTCTGCCTCTGGCAGCTGTGCTAACAGCTCAGTGCTGT CCTGGGAGTCCTCTGACTCAGAACCCTCGAAGCATCCTGCATTGTCTTTACCCACCATCATCGTCACTAAGAGAA ACATGCCTACCCATGAAGGCGTGTTTGATTACTCCAGGCTTCTGGACACACATACCCATGGGTGATTTTTGCTCC TCAGGCCCAATATTCTCAGACAGCCCAGCAGTGTGAACACACAATGCCAGGCCAGGAACTGGGACCACCATCTTG CTGATGGAAGGAACAACAGGTGGCCCAGGACATGCTCCTGCATACTCCTGGGTGTCCCAGGGACTGTGTGCTCAG

FIGURE 1301B

1439/2682 FIGURE 1302

MGKTNSKLAPEVLEDLVQNTEFSEQELKQWYKGFLKDCPSGILNLEEFQQLYIKFFPYGDASKFAQHAFRTFDKN GDGTIDFREFICALSVTSRGSFEQKLNWAFEMYDLDGDGRITRLEMLEIIEAIYKMVGTVIMMRMNQDGLTPQQR VDKIFKKMDQDKDDQITLEEFKEAAKSDPSIVLLLQCDMQK

1440/2682 FIGURE 1303

1441/2682 FIGURE 1304

1442/2682 FIGURE 1305

CCCAAATATATTTTAATCTTGTGGTTCAAATAAGCTTTTGGCTCACATCTAAGCACATCATAAAGAACGCTGTA GAAGAGGTGACATG**ATG**AGGCGGGAAGACGAGGAAGAGGGGAACAATGATGAAGGCAAAAGGGGACTTAGAGA TGAAGGAGGAGGAGATTAGTGAGACAGGAGAACTGGTTGGCCCTTTTGTGAGTGCTATGCCCACTCCAATGC CCCACAACAAGGGCACCCGGTTCTCTGAGGCATGGGAATATTTCCACCTAGCTCCTGCTCGTGCTGGGCACCATC CCAACCAGTATGCCACCTGCCGCCTGTGTGGCAGGCAGGTGAGCCGTGGCCCTGGGGTCAACGTGGGCACCACTG CACTGTGGAAGCATCTGAAAAGCATGCACAGAGAGAGGGGCTGGAGAAGAGTGGCCATGGTCAGGCTGGGCAGCGCC AGGATCCAAGGCCCCACGGGCCCCAGCTCCCCACAGGCATTGAGGGTAACTGGGGTAGGCTCCTGGAGCAGGTGG GCACCATGGCTTTGTGGGCCAGCCAAAGGGAAAAGGAGGTGCTTAGGAGGGAAAGGGCAGTGGAATGGCGGGAGA GGGCTGTGGAAAAAAGGGAGCGAGCCCTGGAGGAGGTGGAAAGGGCCATCCTGGAGATGAAGTGGAAGGTGAGGG CTGAGAAGGAGGCATGCCÁGCGGGAGAAAGAGCTGCCTGCAGCAGTACATCCCTTCCATTTTGTT<u>TAA</u>ATTGGGC TTGGAGAATCTATTCTGAAAACATTGACTCTAGACTTGTAGAAAAGAGCCATTTTAGTTTCAACTCAAATGTAAA GCAAAGTAGTTTGGTGACATTTTGCTTTTATGTGAAATAGTGCACAGTATGAGTTAATCTGAGCAGGTCTGAATT GACCAAATGCTTATCTACGAGGTTCCTAGAGCTCTGCTGACCCTTGGCCGAAACTCTAAAATGTACCTATTAAAG CAAAATAATCAGATTTTTGCCTAGCACTCGGTTTTGGTGGAGCTGACGATTTTGAGGGCTGAGGCTGGTTAGGTA GCTGGAATGTGCCTATGTGACCAGCTCACTTGCAGACACCCTGCCGGAAGCAGAGCTTAATCTTCCTAGGACTGA GGTCTTAGCACATGTACTGGTGGAGTTTCCAGACCACCAGTATGAATAAAAGCTTGTTCTGTGTGACCCAGCAAG TGGAAGGACAAAGAACTGTGAGCCTCAGATCTTTGGACCTTTCCAATGCGTCTCTTTCTCCTGTTATTGCTGCAA

WO 2004/039956 PCT/US2003/034381.

1443/2682 FIGURE 1306

MRREDEEEGTMMKAKGDLEMKEEEEISETGELVGPFVSAMPTPMPHNKGTRFSEAWEYFHLAPARAGHHPNQYA TCRLCGRQVSRGPGVNVGTTALWKHLKSMHREELEKSGHGQAGQRQDPRPHGPQLPTGIEGNWGRLLEQVGTMAL WASQREKEVLRRERAVEWRERAVEKRERALEEVERAILEMKWKVRAEKEACQREKELPAAVHPFHFV

FIGURE 1307

CACATTCCAGAAAAAATACCGCTTTCACAAAACTCGCTCCGCATGACCCCACAGAACACCCAAAGGTCAAAAAAGAG TCCAAAGTTCAGAAAGAAAAGTTATCTGAGTAGACTGATGCTCGCAAACAGGCCTCCGTTCTCTGCAGCGAAGAG CCTCATAAATTCCCCTTCACAAGGGGCTTTTTCATCCTTAGGAGACCTGAGTCCTCAAGAAAACCCTTTTCTGGA AGTATCTGCTCCTTCAGAACATTTTATAGAAACCACTAATATAAAAGACACAACTGCAAGAAATGCCTTGGAAGA AAATGTTTTTATGGAAAACACTAACATGCCAGAAGTCACCATCTCTGAAAACACAAACTACAATCATCCTCCTGA CAGCTACAGTCCCTTATCCCCAACAACAATGTGAGAAGGCTCATTTCTCATGTTATCCGGACCTTGAAGATGGAC TGCTCTGGGGCCCATGTGCAAGTGACCTGTGCCAAGCTCATCTCCAGGACAGGCCACCTGATGAAGCTTCTCAGT GGGCAGCAGGAAGTAAAGGCATCTGAGATAGAATGGGATACGGACCAATGGAAGACTGAGAACTACATTAATGAG AGCACGGAAGCCCAGAGTGAACAGAAAGAGAAGTCGCTTGAGCTCACAAAAGAAGTTCCAGGATACGGCTATACT GACAAACTCATCTTGGCATTAATTGTGACTGAAATACTAATGATTTTGATTATACTTTTCTGCCTCATTGTGGTT TAGGATTGGGTGTGTGTCTCCTCTCTGAATGGCACTCAAATGTTTGCTGACTCCTACTCTGCGTGACTGGGGT GTACAGCTATGGACTGATGCATCCCATCCCATCTTTTCACGAGCAAAGCAGTCTCTTTTTTGACAGCTGAAGA AGAACCTGTAGGGAATCCAGAAGGAGCATTCATGAAGGTGTTACAAGCCCGGAAGAATTACACAAGCACTGAGCT GACTGTTGAGCCGGAGGAGCCCTCAGACAGCAGTGGCATCAACTTGTCAGGCTTTGGGAGTGAGCAGCTAGACAC CAATGACGAGAGTGATGTTATCAGTGCACTAAGTTACATTTGCCATATTTCTCAGCAGTAAACCTAGATGTGGAA TCAATGTTACTACCGTTCATTAAACTGCCAACCACAGGAAACAGCCTGGCAAAGATTCAAACTGTAGGCCAAAAC CGGCAAAAAGTGAATAGAGTCCTCATGGGCCCAATGAGCATCCAGAAAAGGCACTTCAAAGAGGTGGGAAGGCAG AGCATCAGGAGGGAACAGGGTGCCCAGGCATCTGTGGAGAACGCTGCCGAAGAAAAAAGGCTCGGGAGTCCAGCC CCAAGGGAGCTGGAACAGCCTCACACACAGCAGGGGCCTGAGAAGTTAGCGGGAAACGCCATCTACACCAAGCCT TCGTTCAGCCAAGAGCATAAGGCAGCAGTCTCTGTGCTGACACCCTTCTCCAAGGGCGCGCCTTCTACCTCCAGC CCTGCAAAAGCCCTACCACAGGTGAGAGACAGATTGAAAGACAACACACTATTTCCATTTTAGAAAGTGCAAA GGCTAGAGTTACAAATATGAAGGCTTCTAAACCAATTTCACATTCCAG

1445/2682 FIGURE 1308

MTHRTPKVKKSPKFRKKSYLSRLMLANRPPFSAAKSLINSPSQGAFSSLGDLSPQENPFLEVSAPSEHFIETTNI KDTTARNALEENVFMENTNMPEVTISENTNYNHPPEADSAGTAFNLGPTVKQTETKWEYNNVGTDLSPEPKSFNY PLLSLKFS

1446/2682 FIGURE 1309

GGAAGCTCAGCAGTGTCCACTGTCGCCATTCCTTGGCCATAGAAAACAATGTATTTGAATTTTGATGTAAGCATA $\tt TGTTAGCACGAGGAGGAAGGAAGAAA\underline{ATG} GAGATTAGATTGGATACTCTTTCTGCATCACTGGGTAGATCCAGCAC$ TTTAAATGACTGCAACTTGGAAGATAAATTAGCTTGGTATGAAGGTGAAGCTTACATGTGGCATCACTGGAAGCC TTTTCCTGAAAACCCTCTCTGGACATGTCTTGATTTCCAAATAGCACAAGTTGGACCCTGGGACTACTGCTCCTC TTGTATTCGCCACACACGTCTCAAGTCTTCCTGCTCAGATATGGATCTCCTACATTCATGGCGAAGCAGCAGTTT TGGGAATTTCGATCGTTTTCGGAATAATTCTTTATCAAAACCAGATGATTCAACTGAGGCACATGAAGGAGATCC CACAAATGGAAGTGGAGAACAAAGTAAAACTTCAAATAATGGAGGCGGTTTGGGTAAAAAAATGAGAGCTATTTC ATGGACAATGAAGAAAAAGTGGGTAAAAAGTACATCAAAGCCCTTTCTGAGGAAAAGGATGAGGAAGATGGAGA GAATGCCCACCCATATAGAAACAGTGACCCTGTGATTGGGACCCACACAGAGAAGGTGTCCCTCAAAGCCAGTGA CTCCATGGATAGTCTCTACAGTGGACAGAGCTCATCAAGTGGCATAACAAGCTGTTCAGATGGTACAAGTAACCG GGACAGCTTTCGACTGGATGACGATGGCCCCTATTCAGGACCATTCTGTGGCCGTGCCAGAGTGCATACGGATTT CACGCCAAGTCCCTATGACACTGACTCCCTCAAAATCAAGAAAGGAGACATCATAGACATTATTTGCAAAACACC AATGGGGATGTGGACAGGAATGTTGAACAATAAAGTGGGAAACTTCAAATTCATTTATGTGGATGTCATCTCAGA AGAGGAAGCAGCCCCCAAGAAAATAAAGGCAAACCGAAGGAGTAACAGCAAAAAAATCCAAGACTCTGCAGGAGTT CCTAGAGAGGATTCATCTGCAGGAATACACCTCAACACTTTTGCTCAATGGTTATGAGACTCTAGAAGATTTAAA AGATATAAAAGAGAGTCACCTCATTGAATTAAATATTGAAAACCCAGATGACAGAAGAAGGTTACTATCAGCTGC TGAAAACTTCCTTGAAGAAGAAATTATTCAAGAGCAAGAAAATGAACCTGAGCCCCTATCCTTGAGCTCAGACAT $\verb|CTCCTTAAATAAGTCACAGTTAGATGACTGCCCAAGGGACTCTGGTTGCTATATCTCATCAGGAAATTCAGATAA|$ TGGCAAAGAGGATCTGGAGTCTGAAAATCTGTCTGACATGGTACATAAGATTATTATCACAGAGCCAAGTGAC**TG** AACACGCATTCCCAACTATATATCTACAGATGCATTCCATTTTAACTCTTCTTGAGCTAAAACGTCAAATAGGAG AGGAAGATAAGATAAATATTTGTAAATAAAACCTAAAGTTTAAATGTTTTAATCTGAATAATTGTACATAAAATT TTGTATCTCTAACATTCCAAATTACTGTCAATAAAATATATTTTATTTTTAAATGCTATGTGTTAATATTTC ACTTGCTTGTATTAGAAAGGCAAAATGTAAGACTTTGGTATGTGTGACATATGCTTTATTTTGGCTTTATTTTACA AGTACAGTATCTGCAAAAAACAAAGTAACCTTTTTTCATACCTGCCAGTTTTGAATTTATATATGTTATTGAACA AATAGTAATAGAGGATTCGCTGTTGAAACAAGTTGTCCAAGCAATGTTATATTCATTTTTATACTTATTGGGAAA GTGTGAGTTAATATTGGACACATTTTATCCTGATCCACAGTGGAGTTTTAGTAATTATATTTTGTTGATTTCTTC ${\tt ATTTTGTTTTCTGGTATAAAAGTAGAGATAATGTGTAGTCACTTCTGATTTAGTGAAACCAATTGTAATAATTGT}$ GGAAATGTTTTGTCTTTAAGTGTAAATATTTTTAAAATTTGACATACCCTAATGTTAATAATAAAAAAGAACTATTT

1447/2682 FIGURE 1310

MEIRLDTLSASLGRSSTLNDCNLEDKLAWYEGEAYMWHHWKPFPENPLWTCLDFQIAQVGPWDYCSSCIRHTRLK SSCSDMDLLHSWRSSSFGNFDRFRNNSLSKPDDSTEAHEGDPTNGSGEQSKTSNNGGGLGKKMRAISWTMKKKVG KKYIKALSEEKDEEDGENAHPYRNSDPVIGTHTEKVSLKASDSMDSLYSGQSSSSGITSCSDGTSNRDSFRLDDD GPYSGPFCGRARVHTDFTPSPYDTDSLKIKKGDIIDIICKTPMGMWTGMLNNKVGNFKFIYVDVISEEEAAPKKI KANRRSNSKKSKTLQEFLERIHLQEYTSTLLLNGYETLEDLKDIKESHLIELNIENPDDRRRLLSAAENFLEEEI IQEQENEPEPLSLSSDISLNKSQLDDCPRDSGCYISSGNSDNGKEDLESENLSDMVHKIIITEPSD

1448/2682 FIGURE 1311

1449/2682 FIGURE 1312

 ${\tt MSQGLPAAGSVLQRSVAAPGNQPQPQPQQQSPEDDDRKVRREKNRVAAQRSRKKQTQKADKLHEEYESLEQENT} \\ {\tt MLRREIGKLTEELKHLTEALKEHEKMCPLLLCPMNFVPVPPRPDPVAGCLPR}$

1450/2682 FIGURE 1313

CACAAGGACATGGACGTGGACATCCTGGCCCTGGTCAATGACACCGTGGGGACCATGATGACCTGTGCCTATGAC GACCCCTACTGCGAAGTTGGTGTCATCATCGGAACTGGCACCAATGCGTGTTACATGGAGGACATGAGCAACATT GACCTGGTGGAGGGCGACGAGGGCAGGATGTGCATCAACACAGAGTGGGGGGCCCTTCGGGGACGACGGGGCCCTG GAGGACATTCGCACTGAGTTCGACAGGGAGCTGGACCTCGGCTCTCTCAACCCAGGAAAGCAACTGTTCGAGAAG ATGATCAGTGGCCTGTACCTGGGGGAGCTTGTCAGGCTTATCTTGCTGAAGATGGCCAAGGCTGGCCTCCTGTTT GGTGGTGAGAAATCTTCAGCTCTCCACACTAAGGGCAAGATCGAAACACGGCACGTGGCTGCCATGGAGAAGTAA AGAAGGCCTTGCTAATACAAGAGAGATCCTGGTGGACCTGGGTCTGGAACCGTCTGAGGCTGACTGCATTGCCGT CCAGCATGTCTGTACCATCGTCTCCGTCGGCCAATCTCTGTGCAGCAGCTCTGGCGGCCATCCTGACACG $\tt CCTCCGGGAGAACAAGAAGGTGGAACGCTCCGGACCACAGTGGGCATGGACGCCACCCTCTACAAGATACACCC$ TCAGTACCCAAAACGCCTGCACAAGGTGGTGAGGAAACTGGTCCCAAGCTGTGATGTCCGCTTCCTCCTGTCAGA GAGTGCCAGCACCAAGGGGGCCGCCATGGTGACCGCGGTGGCCTCCCGCGTGCAGGCCCAGCGGAAGCAGATCGA CAGGGTGCTGGCTTTGTTCCAGCTGACCCGAGAGCAGCTCGTGGACGTGCAGGCCAAGATGCGGGCTGAGCTGGA GTATGGGCTGAAGAAGAAGACCACGGGCTGGCCACGGTCAGGATGCTGCCCACCTACGTCTGCGGGCTGCCGGA $\tt CGGCACAGAGAAAGGAAAGTTTCTCGCCCTGGATCTTGGGGGAACCAACTTCCGGGTCCTCCTGGTGAAGATCAGAT$ AAGTGGACGGAGGTCAGTGCGAATGTACAACAAGATCTTCGCCATCCCCTGGAGATCATGCAGGGCACTGGTGA GGAGCTCTTTGATCACATTGTGCAGTGCATCGCCGACTTCCTGGACTACATGGGCCTCAAGGGAGCCTCCCTACC TTTGGGCTTCACATTCTCATTTCCCTGCAGGCAGATGAGCATTGACAAGGGAACACTCATAGGGTGGACCAAAGG $\tt TTTCAAGGCCACTGACTGTGAAGGGGAGGACGTGGTGGACATGCTCAGGGAAGCCATCAAGAGGAGAAACGAGTT$ TGACCTGGACATTGTTGCAGTCGTGAATGATACAGTGGGGACCATGATGACCTGTGGCTATGAAGATCCTAATTG TGAGATTGGCCTGATTGCAGGAACAGGCAGCAACATGTGCTACATGGAGGACATGAGGAACATCGAGATGGTGGA GGGGGGTGAAGGGAAGATGTGCATCTGTTTTTCATTTTGCCTGTGGTTTGTTGCAGGTGTTGATAGTTGTTTT AAAAA

1451/2682 FIGURE 1314

MDGTLYKIHPQYPKRLHKVVRKLVPSCDVRFLLSESGSTKGAAMVTAVASRVQAQRKQIDRVLALFQLTREQLVD VQAKMRAELEYGLKKKSHGLATVRMLPTYVCGLPDGTEKGKFLALDLGGTNFRVLLVKIRSGRRSVRMYNKIFAI PLEIMQGTGEELFDHIVQCIADFLDYMGLKGASLPLGFTFSFPCRQMSIDKGTLIGWTKGFKATDCEGEDVVDML REAIKRRNEFDLDIVAVVNDTVGTMMTCGYEDPNCEIGLIAGTGSNMCYMEDMRNIEMVEGGEGKMCICFSFCLW FVLQVLIVVLRIVRYRKSSKLIKKF

FIGURE 1315

ACGCGGGGATTCTGTGTAATTCCTATCCACAGTCACTTCTGTTCATTTTTAATGAAAACCTATTGCTGTTATTTT CTATTATGAGTTAACGGTGATGTGTTTTTTAAATTTTGTATACTTGCTCTCACCCTAAAATATACCTTAAGAG ${\tt ACTTTTCCCCTGTTTTCTTCTTCCTAGCATTCCAAGACTCCAGGAAAAACAGCTTCC} {\tt ATG} {\tt CACATTTTGTACAGGGC}$ ATGAATTCTCTTGAACAAAAGATAAGGTGTTTGGAAAAACAAAGAAAAGAGCTCCTGGAAGTTAACCAGCAATGG AGGCAGCGCGACCTGACCCGGGACCGGCTGCAGCGGGAGGAGAAGGAAAGGAACGCCTAAATGAAGAATTACAT GAATTGAAAGAAGAAGAATAAACTTTTAAAGGGAAAAAATACTCTTGCGAACAAGGAAAAGGAACATTACGAATGT GAAATAAAACGCCTCAATAAGGCTCTTCAGGATGCCTTGAATATCAAGTGTTCATTTTCCGAGGACTGTTTGAGG AAGTCTCGAGTGGAATTCTGCCATGAGGAGATGAGAACAGAAATGGAAGTTCTGAAGCAGCAGGTGCAAATATAC GAAGAAGACTTCAAAAAGGAACGATCGGATCGAGAGAGACTTAATCAAGAGAAAGAGAGCTACAGCAAATTAAT AAGCAATTAAAACAGATGTATTGCCCACCCTGTAACTGCGGCTTGGTTTTCCACCTGCAAGATCCATGGGTACCA AGAGACAACAGGCAACGAGGGAGCGTGGCTGAGGACCCTCTTCTTTGTTTATACTGAGGCTTGTTTCTGCCACAA AGGCACATCATCTACCCTGTTATTTGTGCCTGGTCATGTTTTCCTTTGGTATGAATACAGGAAAAGGCTTCTGAC AGCTAAGATCCTGATCAAATTGGAGGAGCCAGTTATTATACAACCAAATACAACTTCCAGTTTCCTTGAAATGAG ACTTGGCAGATGGATGATGCACGACTCCCTGAAAATCTCTTCAGCATATTGCTGTTGGATGCACAAAAATGATTC GTGTGTGTGTGTGTTTCCTGGGGTAAAAATTTCTGCAGTTGTAAACGTTTAACATTGCTCCCATTCTTCTTCC ACAGGGCCTTAGTTCTTTAGCTATTTGACTACATATTGTTGACCTCAGTGATCCTAAACGTAGAATTGAAGAGGT GTATATACCTCGTTAAATTAAATAAGTGGTTCAATCTGAATAAGATGGTTAATTGGAAGCTATTCCTTAGACAGA TCATTTCTTTAAGATGGTGAGAAATTGTGCGCCTGCATCACAAGACTTGATTATGAAAGATAAAGTCTTGGGCTG GGTGCAGTGGCTCATGCCTATAATCCCAGCACTTTGGGAGGCTGAGGCAGGTGGATTGCTTTGAGGCCAGGAGTT CTAGACCAGCCTGGCCAGCATGGTGAAACCCCATCTCTACTATAAATACAAAAATTAGCCAGGCTCGTGGCACAC ACCTATAAACCCAGCTACTCAGGAGGCTTGAGGCGGGAGGATCACTTGAGCCCAGGGAGGCAGAGGTTGCTGTAA ACCACCAAAAAAAAAAAAAAAAAAAAAAGGAAGACAAAGTCCTGATGGGATGATGATGGCTATATGGCTATGCTG

1453/2682 FIGURE 1316

MAHFVQGTSRMIAAESSTEHKECAEPSTRKNLMNSLEQKIRCLEKQRKELLEVNQQWDQQFRSMKELYERKVAEL KTKLDAAERFLSTREKDPHQRQRKDDRQREDDRQRDLTRDRLQREEKEKERLNEELHELKEENKLLKGKNTLANK EKEHYECEIKRLNKALQDALNIKCSFSEDCLRKSRVEFCHEEMRTEMEVLKQQVQIYEEDFKKERSDRERLNQEK EELQQINETSQSQLNRLNSQIKACQMEKEKLEKQLKQMYCPPCNCGLVFHLQDPWVPTGPGAVQKQREHPPDCQW YALDQLPPDVQHKANGLSSVKKVHP

1454/2682 FIGURE 1317

CGGCCCGCTGGAGAGGCAGGCCCGAGAGCTGCCGCGCCCTGCCGGACGAGGGCGTAGAAGCCAGGCGTCAGAGCC CGGGCTCCGGTGGGGTCCCCCACCCGGCCCTCGGGTCCCCCGCCCCCTGCTCCCATCCCATCCCAGCCCACGCGA GCCGGGTTGCGGAGACATGCTGACGGGCACCGAGCCGATGCCGGGGAGCGACGAGGGCCGGGCGCCTGGCGCGCAGA CCCGCAGCACCGCTACTTCTACCCGGAGCCGGGCGCGCAGGACGCGGACGAGCGTCGCGGGGGGCGCAGCCTGGG GTCTCCCTACCCGGGGGGCGCCTTGGTGCCCGCCCGCCGAGCCGCTTCCTTGGAGCCTACGCCTACCCGCCGCG ACCCAGGCGGCCGGCTTCCCCGGCGGGCGAGTCCTTCCCGCCGCCGCGGACGCCGAGGGCTACCAGCCGGG CGAGGGCTACGCCGCCCCGGACCCGCGCCCGGGCTCTACCCGGGGCCGCGTGAGGACTACGCGCTACCCGCGGG ACTGGAGGTGTCGGGGAAACTGAGGGTCGCGCTCAACAACCACCTGTTGTGGTCCAAGTTTAATCAGCACCAGAC AGAGATGATCATCACCAAGCAGGGACGGCGGATGTTCCCATTCCTGTCATTTACTGTGGCCGGGCTGGAGCCCAC CAGCCACTACAGGATGTTTGTGGACGTGGTCTTGGTGGACCAGCACCACTGGCGGTACCAGAGCGGCAAGTGGGT GCAGTGTGGAAAGGCCGAGGGCAGCATGCCAGGAAACCGCCTGTACGTCCACCCGGACTCCCCCAACACAGGAGC CCAGATGATTGTGCTCCAGTCCCTCCATAAGTACCAGCCCCGGCTGCATATCGTTGAGGTGAACGACGGAGAGCC AGAGGCAGCCTGCAACGCTTCCAACACGCATATCTTTACTTTCCAAGAAACCCAGTTCATTGCCGTGACTGCCTA ${\tt CCAGAATGCCGAGATTACTCAGCTGAAAATTGATAATAACCCCTTTGCCAAAGGATTCCGGGAGAACTTTGAGTC}$ CATGTACACATCTGTTGACACCAGCATCCCCTCCCCGCCTGGACCCAACTGTCAATTCCTTGGGGGAGATCACTA CTCTCCTCCCTACCCAACCAGTATCCTGTTCCCAGCCGCTTCTACCCCGACCTTCCTGGCCAGGCGAAGGATGT GGTTCCCCAGGCTTACTGGCTGGGGGCCCCCCGGGACCACAGCTATGAGGCTGAGTTTCGAGCAGTCAGCATGAA GCCTGCATTCTTGCCCTCTGCCCCTGGGCCCACCATGTCCTACTACCGAGGCCAGGAGGTCCTGGCACCTGGAGC TGGCTGGCCTGTGGCACCCCAGTACCCTCCCAAGATGGGCCCGGCCAGCTGGTTCCGCCCTATGCGGACTCTGCC CATGGAACCCGGCCTGGAGGCTCAGAGGGACGGGGACCAGAGGACCAGGGTCCCCCTTGGTGTGGACTGAGAT TGCCCCCATCCGGCCGGAATCCAGTGATTCAGGACTGGGCGAAGGAGACTCTAAGAGGAGGCGCGTGTCCCCCTA TCCTTCCAGTGGTGACAGCTCCTCCCCTGCTGGGGCCCCTTCTCCTTTTGATAAGGAAGCTGAAGGACAGTTTTA ${\tt TAACTATTTTCCCAAC} \underline{{\tt TGA}}{\tt GCAGATGACATGATGAAAGGAACAGGAACAGTGTTATTAGGTTGGAGGACACCGAC$ GAAGTGGGGCTCAAGAAGGATTTTGGGGTTCACCAGATGCTTCCTGGCCCACGATGAAACCTGAGAGGGGTGTCC CCTTGCCCCATCCTCTGCCCTAACTACAGTCGTTTACCTGGTGCTGCGTCTTTGCTTTTGGTTTCCAGCTGGAGAA GGAGCAGGAGACTCCACTTTCTTCCTTTGTACAGTAACTTTCAACCTTTTCGTTGGCATGTGTTTAATCCCTGA TCCAAAAAGAACAAATACACGTATGTTATAACCATCAGCCCGCCAGGGTCAGGGAAAGGACTCACCTGACTTTGG ACAGCTGGCCTGGGCTCCCCTGCTCAAACACGGGGGATCAGAAAAAGGGGGCTGGAAAGGGGGGAATGGCCC TTTTTTGAATGGGGGAGGCTATTTATTGTACTGAGAGTGGTGTCTGGATATATTCCTTTTGTCTTCATCACTTTC

1455/2682 FIGURE 1318

 $\label{thm:maintender} MGIVEPGCGDMLTGTEPMPGSDEGRAPGADPQHRYFYPEPGAQDADERRGGGSLGSPYPGGALVPAPPSRFLGAY AYPPRPQAAGFPGAGESFPPPADAEGYQPGEGYAAPDPRAGLYPGPREDYALPAGLEVSGKLRVALNNHLLWSKF NQHQTEMIITKQGRRMFPFLSFTVAGLEPTSHYRMFVDVVLVDQHHWRYQSGKWVQCGKAEGSMPGNRLYVHPDS PNTGAHWMRQEVSFGKLKLTNNKGASNNVTQMIVLQSLHKYQPRLHIVEVNDGEPEAACNASNTHIFTFQETQFI AVTAYQNAEITQLKIDNNPFAKGFRENFESMYTSVDTSIPSPPGPNCQFLGGDHYSPLLPNQYPVPSRFYPDLPG QAKDVVPQAYWLGAPRDHSYEAEFRAVSMKPAFLPSAPGPTMSYYRGQEVLAPGAGWPVAPQYPPKMGPASWFRP MRTLPMEPGPGGSEGRGPEDQGPPLVWTEIAPIRPESSDSGLGEGDSKRRRVSPYPSSGDSSSPAGAPSPFDKEA EGQFYNYFPN$

FIGURE 1319

ACCGTCTTCCGCCGCACGTGGATTCAGCGCGGATGCCCAAATCCAAGCGCGACAAGAAAGTCTCCTTAACCAAAAAC TGCCAAGAAAGGCTTGGAATTGAAACAAAACCTGATAGAAGAGCTTCGGAAATGTGTGGACACCTACAAGTACCT TTTCATCTTCTCTGTGGCCAACATGAGGAACAGCAAGCTGAAGGACATCCGGAACGCCTGGAAGCACAGCCGGAT GTTCTTTGGCAAAAACAAGGTGATGATGGTGGCCTTGGGTCGGAGCCCATCTGATGAATACAAAGACAACCTGCA CCAGGTCAGCAAAAGGTTGAGGGGTGAGGTGGGTCTCCTGTTCACCAACCGCACAAAGGAAGAGGTGAATGAGTG GTTCACGAAATACACAGAAATGGACTACGCCCGAGCTGGTAACAAAGCAGCTTTCACTGTGAGCCTGGATCCAGG GCCCTGGAGCAGTTCCCCCACTCCATGGAGCCACAGCTCAGGCAGCTGGGCCTGCCCACCGCCCTCAAGAGAGG TGTGGTGACTCTGCTGTCTGACTACGAGGTGTGCAAGGAGGGCGATGTGCTGACCCCAGAGCAGGCTCGCGTCCT GAAGCTTTTTGGGTATGAGATGGCTGAATTCAAGGTGACCATCAAATACATGTGGGATTCACAGTCGGGAAGGTT ${\tt CCAGCAGATGGGAGACGACTTGCCAGAGAGCGCATCTGAGTCCACAGAAGAGTCAGAACTCAGAAGATGATGAC{\tt TG}$ <u>AAAGGGACTCGGGACTGAAGGTCTCCTGGAAGCTTCTGGGTCTCACTGGACCATCAGGACTGCTGCCGCCCCTCT</u> GGAGAGAGCAGCTTTTTATTTGTCTGTAGACAGGGAACATGATGGGCACTGACCTCCTGTAAAGAATAAAACTGT GGGCCGGGCGGGTGGCTCACGCCTGGAATCCCAGCACTTTGGGAAGCCGAGGTGGGCAGATCATAAGGTCAGGA TGGCATGTGCCTGTAGTCCCAGCTACTCAGGAGGCTGAGGCAGGAGAATCACTTGAACCCGGGAGGTGGAGGTTG CCGTGAGTTGAGATTGGACCACTGCTCTCCAGCCTGGGCAACAGAGTAAAACTCTGTCCC

1457/2682 FIGURE 1320

$$\label{thm:contraction} \begin{align} MPKSKRDKKVSLTKTAKKGLELKQNLIEELRKCVDTYKYLFIFSVANMRNSKLKDIRNAWKHSRMFFGKNKVMMV\\ ALGRSPSDEYKDNLHQVSKRLRGEVGLLFTNRTKEEVNEWFTKYTEMDYARAGNKAAFTVSLDPGPLEQFPHSME\\ PQLRQLGLPTALKRGVVTLLSDYEVCKEGDVLTPEQARVLKLFGYEMAEFKVTIKYMWDSQSGRFQQMGDDLPES\\ ASESTEESDSEDDD\\ \end{align}$$

FIGURE 1321A

 ${\tt TCCAAGCCGGAGGGGTCCTGAGGTGACAGCGCCTGCAACTGAAATTTCAGCAGCGGGAGAAG{\tt ATG}{\tt GACAAGAGAA}}$ AGCTCGGGCGACGGCCATCTTCATCCGAAATCATCACAGAAGGAAAAAGGAAAAAGTCATCTTCTGATTTATCGG AGATAAGAAAGATGTTAAATGCAAAACCAGAGGATGTCCATGTTCAATCACCACTGTCCAAATTCAGAAGCTCAG AACGCTGGACTCTCCCTTTGCAGTGGGAAAGAAGCCTAAGGAATAAAGTCATCTCTCTAGACCATAAAAATAAAA AACATATCCGAGGGTGTCCTGTTACTTCCAGGTCATCACCAGAAAGGATACCCAGAGTTATATTGACGAATGTCC TGGGAACGGAGTTAGGAAGAAAATACATAAGGACCCCACCTGTAACTGAGGGAAGTTTGAGTGATACAGACAACT TGCAATCAGAGCAACTTTCTTCATCATCTGATGGCAGCCTAGAATCTTATCAAAATCTAAACCCTCACAAGAGCT GTTATTTATCTGAAAGGGGCTCACAACGAAGTAAGACAGTAGATGACAATTCTGCAAAGCAGACTGCGCACAATA AAGAAAAACGAAGAAGGATGATGGCATTTCTCTTTTAATATCTGATACTCAGCCTGAAGACCTTAACAGTGGAA GTAGAGGTTGTGATCATCTCGAACAGGAAAGCAGAAACAAGGATGTTAAATATTCTGATTCAAAAGTGGAACTCA CTCTGATTTCCAGGAAGACAAAGAGAAGGCTTAGAAATAATTTACCTGATTCTCAATATTTGTACTTCTTTGGATA AGTCAACAGAACAGACAAAAAAACAAGAAGATGACTCAACAATATCCACTGAGTTTGAAAGGCCAAGTGAAAACT ATCATCAGGATCCAAAACTGCCTGAAGAAATTACAACTAAACCTACAAAAAGTGATTTTACTAAGCTATCCTCAC TTAACAGTCAGGAGTTGACTTTGAGTAATGCCACCAAAAGTGCCTCTGCCGGTTCAACCACTGAAACCGTTGAGT ACTCTAATTCCATTGATATTGTGGGGATTTCTTCCCTGGTTGAGAAGGATGAGAATGAGTTGAATACCATAGAAA AGCCTATTCTAAGAGGACATAATGAAGGGAACCAATCACTGATCTCAGCTGAACCAATTGTTTCCAGTGATG AAGAAGGACCTGTTGAACATAAAAGTTCAGAAATTCTTAAGTTACAATCTAAGCAAGACCGTGAGACAACTAATG AAAATGAGAGTACTTCTGAATCAGCATTGTTAGAACTACCATTGATTACATGTGAATCTGTACAGATGTCATCTG AATTATGCCCATATAATCCTGTCATGGAGAACATTTCCAGTATTATGCCTAGTAATGAGATGGATCTACAACTGG ATATTAAGATCCCATTTCAAGTGTCCCTGAATGAGATTTCATTGCTAGTGGATACCACACATTTAAAGCGGTTTG GGTTATGGAAAAGTAAGGATGATAATCACAGTAAAAGGAGTCATGCTATTCTTTTCTTCTGGGTCTCTTCAGATT ATCTTCAAGAGATTCAGACCCAATTAGAACACTCTGTATTAAGCCAGCAATCAAAATCTAGTGAATTCATTTTCC TTGAACTACACAATCCTGTTTCACAGAGAGAAGAATTGAAGCTGAAAGATATTATGACGGAAATAAGTATAATCA GTGGAGAATTAGAGCTTTCTTACCCGTTGTCTTGGGTTCAGGCATTTCCTTTGTTTCAGAACCTCTCTTCAAAAG AAAGTTCTTTTATTCATTATTACTGTGTTTCAACTTGTTCTTTCCCTGCTGGTGTTGCTGTTGCTGAAGAAATGA AGCTGAAATCAGTATCTCAGCCCTCAAACACAGATGCGGCCAAGCCTACTTACACCTTCCTGCAGAAGCAAAGTA GCGGTTGCTACTCCCTTTCTATTACATCTAATCCAGATGAAGAATGGCGGGAAGTCAGGCACACTGGACTTGTTC AGAAGTTGATTGTATATCCTCCACCACCTACTAAGGGGGGGATTGGGAGTAACTAATGAAGATCTGGAGTGTTTAG AAGAAGGAGAGTTTCTTAATGATGTAATCATTGATTTTTACCTTAAGTATCTTATATTGGAGAAGGCATCAGATG AACTTGTTGAACGAAGTCACATTTTTAGTAGCTTTTTCTATAAATGCTTGACAAGAAAGGAAAATAATTTAACAG AAGATAATCCAAATCTTTCAATGGCACAGAGAAGACATAAAAGAGTAAGAACATGGACTCGTCACATAAACATTT TTAATAAAGATTACATCTTTGTACCTGTAAATGAGTCGTCTCACTGGTATCTCGCAGTCATTTGTTTTCCATGGT TAGAAGAAGCTGTGTATGAAGATTTTCCACAAACTGTATCCCAGCAGTCCCAGGCTCAGCAGTCCCAAAGTGACA ACAAAACAATAGATAATGATCTACGTACTACTTCGACACTGTCTTTGAGTGCAGAGGATTCCCAAAGTACCGAGT CGAATATGTCAGTACCAAAGAAATGTGTAAAAGGCCATGTATTCTTATACTAGACTCCTTGAAAGCTGCTTCTG TACGAAACACAGTTCAGAATTTACGAGAGTATTTAGAGGTAGAGTGGGAAGTTAAACTAAAAACTCATCGTCAAT TCAGCAAAACAAACATGGTGGATCTATGCCCTAAAGTTCCTAAACAGGACAATAGCAGTGATTGTGGAGTATATT TATTGCAGTATGTGGAAAGCTTCTTCAAGGATCCTATTGTTAACTTTGAACTTCCAATTCATTTGGAGAAGTGGT TTCCTCGTCATGTAATAAAGACCAAACGGGAAGATATTCGAGAGCTCATCTTGAAACTTCATTTACAGCAACAGA AGGGCAGCAGTAGC**TAG**TTAATCTGTACAAACATGACACAGATGTTCTCTAAGATTACTGGAAAGCCCCCTTACCA GCATTTGTGTTAGCCAGCTCACAGAGAAAAAAAAACTTGCAGTAGTTTTATAATAAGTCATTGGAACATTATTT AAAATATGTAGGACACATTATTAGAATTGTTGGGATCTCATAGATGGAATGGGAATGGGGGTGATATAGATAAAC TTACTAGATATAAATTTAAAATTTTATAAATATTTCATATTTTTCTGAGTAAATATGATTGGATTATGCAACAGCA TATGTAATATGGGAATGTTTTGTAGATAATAAAACTTACATGATCTGTACTTCCACGTGACTGGGTGCTGAGGGG AGTTAAAGCCTCCCTGGTGCCAGCCCCAGTGCTTGTCAAATTTGCTGACAGGTCACATCATATTGTAATTCTATT CTTTGCAGCTCAAGCATGCAGTATGAATACTGTGTATTTTTTAAAAAAATAATTTAGTATCAAGGCTTCAGAAAA

1459/2682 FIGURE 1321B

TGCCATTTACGGCATCCCTTCTGTATGTAACAAAAAGACATTCATAATGTTAGGAAGATGATAAAAATTCGCTCT ATATGTGAGTATCTTATAATTTAGTTCATTTGTTCAGGGTAAAATTTGAAACAAAAAATTTTACCTGTGCAAAAT TTATGTATAGTTTCTCTAATATAGAAGATAAAATTGGTGTCCTCATAACTTTAACAAAGAAAACCCTCAGTCCTA TTTATTAATGGGTAGAATTAAATATATATTTTATAGCTCAGTTTACCCAGTATTCATCTGCAAAGCCAGATTGC TCTCATTGCTTTTATATTTTTAAATTGTAGCTTTTAGAGACCTATGATCCTCATGGAACTTAATTTTTTATTAAA TATTCAGGTAACAGTTCTGAATTCATGTGATAATGGTGGCATTATATATGATTAAACACTTCAGAACTTTCTAAT GTTATCAGGAGTATTTTGAGGGAGATATGATTATATTGTATTTTCTCAGATAAGAAAAATGTTTTTTAACAATAT TATTTTAATCTGTTTTAAGCATCTCTTAGATTTACATTATAACTACATAAAGCAGTGAAGCAAAGGCAAATTAAG TTTTGTTGATTTTGGCACTATCTTTATATTATTAAATATTTTGTTGTTTGGATATTTCATATAAAGATGGCTAT AATTACATATTTCATTCCCAATTTGTGTGTGTGTGGGGGGGTACTTTTAAAGGTGACTATTGTTTTGTACATCTAAT GTCCTTTATCATGTTTTGAAGATTGTTTAAAATTCATTTTCCTAAATTAATGTGCAAGTAATGTTTTGAGGATAT **ATGATGATGATGATGATGTCGAC**

1460/2682 FIGURE 1322

MDKRKLGRRPSSSEIITEGKRKKSSSDLSEIRKMLNAKPEDVHVQSPLSKFRSSERWTLPLQWERSLRNKVISLD
HKNKKHIRGCPVTSRSSPERIPRVILTNVLGTELGRKYIRTPPVTEGSLSDTDNLQSEQLSSSSDGSLESYQNLN
PHKSCYLSERGSQRSKTVDDNSAKQTAHNKEKRRKDDGISLLISDTQPEDLNSGSRGCDHLEQESRNKDVKYSDS
KVELTLISRKTKRRLRNNLPDSQYCTSLDKSTEQTKKQEDDSTISTEFERPSENYHQDPKLPEEITTKPTKSDFT
KLSSLNSQELTLSNATKSASAGSTTETVEYSNSIDIVGISSLVEKDENELNTIEKPILRGHNEGNQSLISAEPIV
VSSDEEGPVEHKSSEILKLQSKQDRETTNENESTSESALLELPLITCESVQMSSELCPYNPVMENISSIMPSNEM
DLQLDFIFTSVYIGKIKGASKGCVTITKKYIKIPFQVSLNEISLLVDTTHLKRFGLWKSKDDNHSKRSHAILFFW
VSSDYLQEIQTQLEHSVLSQQSKSSEFIFLELHNPVSQREELKLKDIMTEISIISGELELSYPLSWVQAFPLFQN
LSSKESSFIHYYCVSTCSFPAGVAVAEEMKLKSVSQPSNTDAAKPTYTFLQKQSSGCYSLSITSNPDEEWREVRH
TGLVQKLIVYPPPPTKGGLGVTNEDLECLEEGEFLNDVIIDFYLKYLILEKASDELVERSHIFSSFFYKCLTRKE
NNLTEDNPNLSMAQRRHKRVRTWTRHINIFNKDYIFVPVNESSHWYLAVICFPWLEEAVYEDFPQTVSQQSQAQQ
SQSDNKTIDNDLRTTSTLSLSAEDSQSTESNMSVPKKMCKRPCILILDSLKAASVRNTVQNLREYLEVEWEVKLK
THRQFSKTNMVDLCPKVPKQDNSSDCGVYLLQYVESFFKDPIVNFELPIHLEKWFPRHVIKTKREDIRELILKLH
LQQQKGSSS

FIGURE 1323

GGGGACTTCCGGAGACCTCACACAAG<u>ATC</u>GCGGCACCCGAGGAACACGATTCTCCGACCGAAGCGTCCCAGCCGA TTGTGGAAGAGGAGGAACTAAAACATTTAAAGACCTGGGTGTGACAGATGTGTTGTGTGAAGCTTGTGACCAGT TGGGATGGACAAAACCCACCAAGATTCAGATTGAAGCTATTCCTTTGGCCTTACAAGGTCGTGATATCATTGGGC TTGCAGAAACTGGCTCTGGAAAGACAGGCGCCTTTGCTTTGCCCATTCTAAACGCACTGCTGGAGACCCCGCAGC GTTTGTTTGCCCTAGTTCTTACCCCGACTCGGGAGCTGGCCTTTCAGATCTCAGAGCAGTTTGAAGCCCTGGGGT CCTCTATTGGAGTGCAGAGTGCTGTGATTGTAGGTGGAATTGATTCAATGTCTCAATCTTTGGCCCTTGCAAAAA AACCACATATAATAATAGCAACTCCTGGTCGACTGATTGACCACTTGGAAAATACGAAAGGTTTCAACTTGAGAG CTCTCAAATACTTGGTCATGGATGAAGCCGACCGAATACTGAATATGGATTTTGAGACAGAGGTTGACAAGATCC TCAAAGTGATTCCTCGAGATCGGAAAACATTCCTCTTCTCTCCCACCATGACCAAGAAGGTTCAAAAAACTTCAGC GAGCAGCTCTGAAGAATCCTGTGAAATGTGCCGTTTCCTCTAAATACCAGACAGTTGAAAAATTACAGCAATATT ATATTTTTATTCCCTCTAAATTCAAGGATACCTACCTGGTTTATATTCTAAATGAATTGGCTGGAAACTCCTTTA TGATATTCTGCAGCACCTGTAATAATACCCAGAGAACAGCTTTGCTACTGCGAAATCTTGGCTTCACTGCCATCC CCCTCCATGGACAAATGAGTCAGAGTAAGCGCCTAGGATCCCTTAATAAGTTTAAGGCCAAGGCCCGTTCCATTC TTCTAGCAACTGACGTTGCCAGCCGAGGTTTGGACATACCTCATGTAGATGTGGTTGTCAACTTTGACATTCCTA CCCATTCCAAGGATTACATCCATCGAGTAGGTCGAACAGCTAGAGCTGGGCGCTCCGGAAAGGCTATTACTTTTG TCACACAGTATGATGTGGAACTCTTCCAGCGCATAGAACACTTAATTGGGAAGAAACTACCAGGTTTTCCAACAC AGGATGATGAGGTTATGATGCTGACAGAACGCGTCGCTGAAGCCCAAAGGTTTGCCCGAATGGAGTTAAGGGAGC ATGGAGAAAAGAAACGCTCGCGAGAGGATGCTGGAGATAATGATGACACAGAGGGTGCTATTGGTGTCAGGA ACAAGGTGGCTGGAGGAAAAATGAAGAAGCGGAAAGGCCGT<u>TAA</u>TCACTTTTATGAAGGCTCGAGTTCTGCTGTT CTGTAAAAGAAATTGGAGAATGAAACCTGCTCCAACAGAGATCATGAGACTGAAATTGGTCAGAATTGTGTCCA GAATGTGCTCAGCTAATTCAGTATTCTTCCCCATTCTGGGTTTGGAGTTTACTGCAGAGTAATTCTTACAGTGCTG ATGTCAAGACTGTTACTGTTCTTCGACTTTGATTCCTTGCTCATGACATGAGTAGGGTGTGCTCTTCTGTCACTT CACACAGACCTTTTGCCTTTTTTAGCTGCAAGTCAAGGACTAGGTTGATGATGCCCATGACCTGTAATTGTAAAG **AAGCTTGGACATCTGCAAATGATATTTAAACCATCTTGGCTTGTGCTTTATTCAAACTAATGTGAAACAATAAAT**

1462/2682 FIGURE 1324

MAAPEEHDSPTEASQPIVEEEETKTFKDLGVTDVLCEACDQLGWTKPTKIQIEAIPLALQGRDIIGLAETGSGKT GAFALPILNALLETPQRLFALVLTPTRELAFQISEQFEALGSSIGVQSAVIVGGIDSMSQSLALAKKPHIIIATP GRLIDHLENTKGFNLRALKYLVMDEADRILNMDFETEVDKILKVIPRDRKTFLFSATMTKKVQKLQRAALKNPVK CAVSSKYQTVEKLQQYYIFIPSKFKDTYLVYILNELAGNSFMIFCSTCNNTQRTALLLRNLGFTAIPLHGQMSQS KRLGSLNKFKAKARSILLATDVASRGLDIPHVDVVVNFDIPTHSKDYIHRVGRTARAGRSGKAITFVTQYDVELF QRIEHLIGKKLPGFPTQDDEVMMLTERVAEAQRFARMELREHGEKKKRSREDAGDNDDTEGAIGVRNKVAGGKMK KRKGR

1463/2682 FIGURE 1325

GGCACGAGGGCCAGGAACGCCAGCCGTTCACGCGTTCGGTCCTCCTTGGCTGACTCACCGCCCTCGCCGCCGCAC $\texttt{C} \underline{\textbf{ATG}} \texttt{GACGCCCCAGGCAGGTGGTCAACTTTGGGCCTGGTCCCGCCAAGCTGCCGCACTCAGTGTTGTTAGAGAT}$ ACAAAAGGAATTATTAGACTACAAAGGAGTTGGCATTAGTGTTCTTGAAATGAGTCACAGGTCATCAGATTTTGC CAAGATTATTAACAATACAGAGAATCTTGTGCGGGAATTGCTAGCTGTTCCAGACAACTATAAGGTGATTTTTCT GCAAGGAGGTGGGTGCGCCAGTTCAGTGCTGTCCCCTTAAACCTCATTGGCTTGAAAGCAGGAAGGTGTGCGGA CTATGTGGTGACAGGAGCTTGGTCAGCTAAGGCCGCAGAAGAAGCCAAGAAGTTTGGGACTATAAATATCGTTCA CCCTAAACTTGGGAGTTATACAAAAATTCCAGATCCAAGCACCTGGAACCTCAACCCAGATGCCTCCTACGTGTA TTATTGCGCAAATGAGACGGTGCATGGTGTGGAGTTTGACTTTATACCCGATGTCAAGGGAGCAGTACTGGTTTG TGACATGTCCTCAAACTTCCTGTCCAAGCCAGTGGATGTTTCCAAGTTTGGTGTGATTTTTGCTGGTGCCCAGAA GAATGTTGGCTCTGCTGGGGTCACCGTGGTGATTGTCCGTGATGACCTGCTGGGGTTTGCCCTCCGAGAGTGCCC CTCGGTCCTGGAATACAAGGTGCAGGCTGGAAACAGCTCCTTGTACAACACGCCTCCATGTTTCAGCATCTACGT CATGGGCTTGGTTCTGGAGTGGATTAAAAACAATGGAGGTGCCGCGGCCATGGAGAAGCTTAGCTCCATCAAATC TCAAACAATTTATGAGATTATTGATAATTCTCAAGGATTCTACGTTTGTCCAGTGGAGCCCCAAAATAGAAGCAA GATGAATATTCCATTCCGCATTGGCAATGCCAAAGGAGATGATGCTTTAGAAAAAAGATTTCTTGATAAAGCTCT TGAACTCAATATGTTGTCCTTGAAAGGGCATAGGTCTGTGGGAGGCATCCGGGCCTCTCTGTATAATGCTGTCAC AATTGAAGACGTTCAGAAGCTGGCCGCCTTCATGAAAAAATTTTTTGGAGATGCATCAGCTA<u>TGA</u>ACACATCCTAA CCAGGATATACTCTGTTCTTGAACAACATACAAAGTTTAAAGTAACTTGGGGATGGCTACAAAAAGTTAACACAG TATTTTCTCAAATGAACATGTTTATTGCAGATTCTTCTTTTTTGAAAGAACAACAGCAAAACATCCACAACTCT GTAAAGCTGGTGGGACCTAATGTCACCTTAATTCTGACTTGAACTGGAAGCATTTTAAGAAATCTTGTTGCTTTT CTAACAAATTCCCGCGTATTTTGCCTTTTGCTGCTACTTTTTCTAGTTAGATTTCAAACTTGCCTGTGGACTTAAT AATGCAAGTTGCGATTAATTATTTCTGGAGTCATGGGAACACACAGCACAGAGGGTAGGGGGGCCCTCTAGGTGC TGAATCTACACATCTGTGGGGTCTCCTGGGTTCAGCGGCTGTTGATTCAAGGTCAACATTGACCATTGGAGGAGGT TATATATGTTTATATTAGCAAGGTCTGTTTTTAATACCATATACTTTATATTTCTATACATTTATATTTCTAATA ATACAGTTATCACTGATATATGTAGACACTTTTAGAATTTATTAAATCCTTGACCTTGTGCATTATAGCATTCCA TTAGCAAGAGTTGTACCCCCTCCCCAGTCTTCGCCTTCCTCTTTTTAAGCTGTTTTATGAAAAAGACCTAGAAGT TTAAACTAAACATTTCTGTTAAATTACCCTATCCTTTGTTCTCTACTGTTTTCTTTGTAATGTATGACTACGAGA GTGATACTTTGCTGAAAAGTCTTTCCCCTATTGTTTATCTATTGTCAGTATTTTATGTTGAATATGTAAAGAACA

1464/2682 FIGURE 1326

MDAPRQVVNFGPGPAKLPHSVLLEIQKELLDYKGVGISVLEMSHRSSDFAKIINNTENLVRELLAVPDNYKVIFL QGGGCGQFSAVPLNLIGLKAGRCADYVVTGAWSAKAAEEAKKFGTINIVHPKLGSYTKIPDPSTWNLNPDASYVY YCANETVHGVEFDFIPDVKGAVLVCDMSSNFLSKPVDVSKFGVIFAGAQKNVGSAGVTVVIVRDDLLGFALRECP SVLEYKVQAGNSSLYNTPPCFSIYVMGLVLEWIKNNGGAAAMEKLSSIKSQTIYEIIDNSQGFYVCPVEPQNRSK MNIPFRIGNAKGDDALEKRFLDKALELNMLSLKGHRSVGGIRASLYNAVTIEDVQKLAAFMKKFLEMHQL

FIGURE 1327

CTAAAGTGGAGCCCAGCGGCGGGTGTGAGAGTCCGTAAGGAGCAGCTTCCAGGATCCTGAGATCCGGAGCAGCCG GGGTCGGAGCGGCTCCTCAAGAGTTACTGATCTATGAAATGGCAGAGAATGGAAAAAATTGTGACCAGAGACGTG GGGAAGAAAGGCAGAATATTGTCCTGTGGAGACAGCCGCTCATTACCTTGCAGTATTTTTCTCTGGAAAATCCTTG TGCTTATAGCTACGTATTATGTTGAAGGAGTGCATCAACAGTATGTGCAACGTATAGAGAAACAGTTTCTTTTGT ATGCCTACTGGATAGGCTTAGGAATTTTGTCTTCTGTTGGGCTTGGAACAGGGCTGCACACCTTTCTGCTTTATC TGGGTCCACATATAGCCTCAGTTACATTAGCTGCTTATGAATGCAATTCAGTTAATTTTCCCGAACCACCCTATC CTGATCAGATTATTTGTCCAGATGAAGAGGGCACTGAAGGAACCATTTCTTTGTGGAGTATCATCTCAAAAGTTA GGATTGAAGCCTGCATGTGGGGTATCGGTACAGCAATCGGAGAGCTGCCTCCATATTTCATGGCCAGAGCAGCTC GCCTCTCAGGTGCTGAACCAGATGATGAAGAGTATCAGGAATTTGAAGAGATGCTGGAACATGCAGAGTCTGCAC AAGACTTTGCCTCCCGGGCCAAACTGGCAGTTCAAAAACTAGTACAGAAAGTTGGATTTTTTGGAATTTTGGCCT GTGCTTCAATTCCAAATCCTTTATTTGATCTGGCTGGAATAACGTGTGGACACTTTCTGGTACCTTTTTGGACCT TCTTTGGTGCAACCCTAATTGGAAAAGCAATAATAAAAATGCATATCCAGAAAATTTTTGTTATAATAACATTCA GCAAGCACATAGTGGAGCAAATGGTGGCTTTCATTGGTGCTGTCCCCGGCATAGGTCCATCTCTGCAGAAGCCAT TTCAGGAGTACCTGGAGGCTCAACGGCAGAAGCTTCACCACAAAAGCGAAATGGGCACACCACAGGGAGAAAACT CACAAAGTTATGCCAAACGAATCCAGCAGCGGTTGAACTCAGAGGAGAAAACTAAA<u>TAA</u>GTAGAGAAAGTTTTAA CAACCTGTATCAATTTTTACAACTTTTTTCCTGAAAGCAGTTTAGTCCATACTTTGCACTGACATACTTTTCCT TCTGTGCTAAGGTAAGGTATCCACCCTCGATGCAATCCACCTTGTGTTTTCTTAGGGTGGAATGTGATGTTCAGC AGCAAACTTGCAACAGACTGGCCTTCTGTTTGTTACTTTCAAAAGGCCCACATGATACAATTAGAGAATTCCCAC CGCACAAAAAAGTTCCTAAGTATGTTAAATATGTCAAGCTTTTTAGGCTTGTCACAAATGATTGCTTTGTTTTC CTAAGTCATCAAAATGTATATAAATTATCTAGATTGGATAACAGTCTTGCATGTTTATCATGTTACAATTTAATA TTCCATCCTGCCCAACCCTTCCTCTCCCATCCTCAAAAAAAGGGCCATTTTATGATGCATTGCACACCCTCTGGGG TATTCTGTGTATTTAGAATGAAGTCTTGAAAAAAACTTTATAAAGACATCTTTAATCATTCCAAAATTGTGTCCG TTTTCTTGAGCGTTTTGATTTTTACTTTTAGCTTATACCAGCTGAATGGCAGCCTTGCCTAATCCACCTACAAC AAGAATTTCTTAAGCTTTCTTTTATTTGCATGAGAGAGCCACTACCAAGGCATGTTTTGTTATGCTGAAACTGGG CTGCTGCATACTGCTAAATGGCACCTCTGGGATTGGCCTACCTGGGGATTTCTTGGTTTGTGAAAACAGGAGAGG TATCTGTGTTAATGTTTTCTAGCATGTACTCTGGTTTCAACAGACACAAATTTATATGTTAACCCAGTTTTCTTG

FIGURE 1328

MAENGKNCDQRRVAMNKEHHNGNFTDPSSVNEKKRREREERQNIVLWRQPLITLQYFSLEILVILKEWTSKLWHR QSIVVSFLLLLAVLIATYYVEGVHQQYVQRIEKQFLLYAYWIGLGILSSVGLGTGLHTFLLYLGPHIASVTLAAY ECNSVNFPEPPYPDQIICPDEEGTEGTISLWSIISKVRIEACMWGIGTAIGELPPYFMARAARLSGAEPDDEEYQ EFEEMLEHAESAQDFASRAKLAVQKLVQKVGFFGILACASIPNPLFDLAGITCGHFLVPFWTFFGATLIGKAIIK MHIQKIFVIITFSKHIVEQMVAFIGAVPGIGPSLQKPFQEYLEAQRQKLHHKSEMGTPQGENWLSWMFEKLVVVM VCYFILSIINSMAQSYAKRIQQRLNSEEKTK

1467/2682 FIGURE 1329

1468/2682 FIGURE 1330

 $\label{thm:like} $$ MLVNFILRCGLLLVTLSLAIAKHKQSSFTKSCYPRGTLSQAVDALYIKAAWLKATIPEDRIKNIRLLKKKTKQF$$ MKNCQFQEQLLSFFMEDVFGQLQLQGCKKIRFVEDFHSLRQKLSHCISCASSAREMKSITRMKRIFYRIGNKGIY$$ KAISELDILLSWIKKLLESSQ$

1469/2682 FIGURE 1331

1470/2682 FIGURE 1332

 $\label{thm:colling} $$ \text{MAALQKSVSSFLMGTLATSCLLLLALLVQGGAAAPISSHCRLDKSNFQQPYITNRTFMLAKEASLADNNTDVRLI$$ $$ \text{GEKLFHGVSMSERCYLMKQVLNFTLEEVLFPQSDRFQPYMQEVVPFLARLSNRLSTCHIEGDDLHIQRNVQKLKD}$$ $$ \text{TVKKLGESGEIKAIGELDLLFMSLRNACI}$$$

1471/2682 FIGURE 1333

TTTACTTCCTGCGTCCCCGGACGCCGTATGTGGAAAGGCGAACCCTGAGTGGAGGATGTTCCCGCTGCCTAAAGA GAAGACAGCCTGGAAGACTCAAACCTTTTTCCAAAAGTTTGGCATTCTGAGATGACGGTGTCAGCGACAGGCGAA CCACCTAGTGCCGTCGAAGAAGAAGGAATACCTAACGAAACAGACATAGAAATCATGCCAGAAATCCCGGAAACT CTAGAGCCACTGTCCCTTCCAGATGTGCTGAGGATCTCGGCAGTTCTGGAGGACCACCACAGACCAGCTCTTTATT CTGAACTACATCATGCCCGTTCAGTACGATGGGAGACAGAGCATCTGCGTGAAAAGCAGAGAATTGAATCTAGAA GGAACGAATCTAGACAAACTTGCAATGGGCCTCAACATGACAAAAATACTCAGTCCGTTACTACCTGTGGAAGGA ${\tt CCCAATTTGCCTGATTTCACACCCAGAGGCCGGTTCGCTGTGGAGTTTAACAAAATGCAGGATCTTGTCTTCAAA}$ AAACCTACAAGGCAGACCATCATGACTACGGAGACACTGAAGAAAATTCACATTGATAGGCAGTTTTTCAGCGAT GTGATTGCAGATACCATTAAGGAGTTGCAAGATTCGGCCACTTACAACAGTCTCCTGCAAGCTTTGAGCAAAGAG AGGGAAAACAAAATGCATTTCTATGACATCATTGCCAGGGAGGAAAAAGGAAGAAAACAGATAATATCACTTCAA AAACAGCTAATTAATGTCAAAAAGGAATGGCAATTTGAAGTCCAGAGTCAGAATGAGTATATTGCTAACCTCAAG GACCAACTGCAAGAGATGAAGGCAAAATCCAACTTGGAGAATCGCTACATGAAAACCAATACCGAGCTGCAGATT GCCCAGACCCAGAAAAAGTGTAACAGAACAGAGGAACTCTTGGTGGAAGATTTTGAGAAACTCAGGATGAAAACC GAAGAAGAGGCCCGGACTCATACAGAGATTGAAATGTTCCTTAGAAAGGAGCAGCAGAAACTTGAGGAGAGGCTG GAGTTCTGGATGGAGAAATACGATAAGGACACAGAAATGAACAGAATGAACTAAATGCTCTCAAAGCCACAAAG GCCAGTGTCTTAGCACACCTTCAAGACCTGGCAAAGATGATAAGAGAGTATGAACAGGTCATCATTGAAGATCGT ATAGAAAAGGAGAGGAGCAAGAAGAAGGTAAAACAGGATCTCTTGGAATTAAAGAGCGTTATAAAGCTCCAGGCC TGGTGGCGAGGCACTATGATACGGAGAAATTGGTGGTTTCAAGATGCCTAAAGACAAAGTTGATAGCAAGGAT ${\tt TCAAAAGGCAAAGGTAAAGGCAAGGATAAGAGGAGGAGGAGGAAGAAGAAG{\tt TGA}CCAAGTTCTCTTTTGTGTTTTCTG}$ CTGGTATTCTGGAGGTGGGAAGGACTTGGAGAGAGTTAAGAAACACCTGGTACCTCAAAGATGACTCATCTACAG GTTGTTTCCTATTGAGACTTTCCCAGGGAAGCCTGATTTCACTTTGCCTGTTAATTTCACTCTGCCTGTTAGGTG GGTTTTCAAACCCTGATTTAGGATTACACCATTGACTTAGGGCTTCCTCATACCTTGCTGGGAAGAAGTTTCTAG TAGTCCTGTGAAGATTCATTCTTCTTGCTCTTTCTCAGCAGAACAAAGGAGTTCACTGGCTTAGCTACAGTGACG CATTGAAACTTGAGTAATTCCTGTAATGTCAGATTTTGATTTTACCCAATTTGTCTGTAGTGAAAAAACTCTTAT GAGCAAAAGTATTCAGTAGGAATTACAATATGATGTTATTAGCTGTCCAGCATAATATATACACAGCAAAGTTTT

1472/2682 FIGURE 1334

MEEDSLEDSNLFPKVWHSEMTVSATGEPPSAVEEEGIPNETDIEIMPEIPETLEPLSLPDVLRISAVLEDTTDQL FILNYIMPVQYDGRQSICVKSRELNLEGTNLDKLAMGLNMTKILSPLLPVEGPNLPDFTPRGRFAVEFNKMQDLV FKKPTRQTIMTTETLKKIHIDRQFFSDVIADTIKELQDSATYNSLLQALSKERENKMHFYDIIAREEKGRKQIIS LQKQLINVKKEWQFEVQSQNEYIANLKDQLQEMKAKSNLENRYMKTNTELQIAQTQKKCNRTEELLVEDFEKLRM KTEEEARTHTEIEMFLRKEQQKLEERLEFWMEKYDKDTEMKQNELNALKATKASVLAHLQDLAKMIREYEQVIIE DRIEKERSKKKVKQDLLELKSVIKLQAWWRGTMIRREIGGFKMPKDKVDSKDSKGKGKGKKKKKKK

FIGURE 1335

GTCATGTTCTTCGCGCCCTGGTGTGGACACTGCCAGCGGCTGCAGCCGACTTGGAATGACCTGGGAGACAAATAC AACAGCATGGAAGATGCCAAAGTCTATGTGGCTAAAGTGGACTGCACGGCCCACTCCGACGTGTGCTCCGCCCAG GGGGTGCGAGGATACCCCACCTTAAAGCTTTTCAAGCCAGGCCAAGAAGCTGTGAAGTACCAGGGTCCTCGGGAC TTCCAGACACTGGAAAACTGGATGCTGCAGACACTGAACGAGGAGCCAGTGACACCAGAGCCGGAAGTGGAACCG GACCACTTTATCAAGTTCTTCGCTCCGTGGTGTGGTCACTGCAAAGCCCTGGCTCCAACCTGGGAGCAGCTGGCT CTGGGCCTTGAACATTCCGAAACTGTCAAGATTGGCAAGGTTGATTGTACACAGCACTATGAACTCTGCTCCGGA AACCAGGTTCGTGGCTATCCCACTCTTCTCTGGTTCCGAGATGGGAAAAAGGTGGATCAGTACAAGGGAAAGCGG GATTTGGAGTCACTGAGGGAGTACGTGGAGTCGCAGCTGCAGCGCACAGAGACTGGAGCGACGGAGACCGTCACG TTCGATGACACCATTGCAGAAGGAATAACCTTCATCAAGTTTTATGCTCCATGGTGTGGTCATTGTAAGACTCTG GCTCCTACTTGGGAGGAACTCTCTAAAAAGGAATTCCCTGGTCTGGCGGGGGTCAAGATCGCCGAAGTAGACTGC ACTGCTGAACGGAATATCTGCAGCAAGTATTCGGTACGAGGCTACCCCACGTTATTGCTTTTCCGAGGAGGGAAG AAAGTCAGTGAGCACAGTGGAGGCAGAGACCTTGACTCGTTACACCGCTTTGTCCTGAGCCAAGCGAAAGACGAA CTT**TAG**GAACACAGTTGGAGGTCACCTCTCCTGCCCAGCTCCCGCACCCTGCGTTTAGGAGTTCAGTCCCACAGA TTTTCCAAGCCAACACTCTACAGATTCTTTATTAAATGTGTAACTCATGGTCACTGTGTAAACATTTTCAGTG GCGATATATCCCCTTTGACCTTCTCTTGATGAAATTTACATGGTTTCCTTTGAGACTAAAATAGCGTTGAGGGAA ACCTGCCCACGAGTTCTGGAAAGGTGGCCTTGTGGCAGTATTGACGTTCCTCTGATCTTAAGGTCACAGTTGACT CAATACTGTGTTGGTCCGTAGCATGGAGCAGATTGAAATGCAAAAACCCACACCTCTGGAAGATACCTTCACGGC CGCTGCTGGAGCTTCTGTTGCTGTGAATACTTCTCTCAGTGTGAGAGGGTTAGCCGTGATGAAAGCAGCGTTACTT CTGACCGTGCCTGAGTAAGAGAATGCTGATGCCATAACTTTATGTGTCGATACTTGTCAAATCAGTTACTGTTCA GGGGATCCTTCTGTTTCTCACGGGGTGAAACATGTCTTTAGTTCCTCATGTTAACACGAAGCCAGAGCCCACATG AACTGTTGGATGTCTTCCTTAGAAAGGGTAGGCATGGAAAATTCCACGAGGCTCATTCTCAGTATCTCATTAACT CATTGAAAGATTCCAGTTGTATTTGTCACCTGGGGTGACAAGACCAGACAGGCTTTCCCAGGCCTGGGTATCCAG GGAGGCTCTGCAGCCCTGCTGAAGGGCCCTAACTAGAGTTCTAGAGTTTCTGATTCTGTTTCTCAGTAGTCCTTT TAGAGGCTTGCTATACTTGGTCTGCTTCAAGGAGGTCGACCTTCTAATGTATGAAGAATGGGATGCATTTGATCT CAAGACCAAAGACAGATGTCAGTGGGCTGCTCTGGCCCTGGTGTGCACGGCTGTGGCAGCTGTTGATGCCAGTGT CCTCTAACTCATGCTGTCCTTGTGATTAAACACCTCTATCTCCCTTGGGAATAAGCACATACAGGCTTAAGCTCT AAGATAGATAGGTGTTTGTCCTTTTACCATCGAGCTACTTCCCATAATAACCACTTTGCATCCAACACTCTTCAC CCACCTCCCATACGCAAGGGGATGTGGATACTTGGCCCAAAGTAACTGGTGGTAGGAATCTTAGAAACAAGACCA CTTATACTGTCTGTCTGAGGCAGAAGATAACAGCAGCATCTCGACCAGCCTCTGCCTTAAAGGAAATCTTTATTA ATCACGTATGGTTCACAGATAATTCTTTTTTAAAAAAACCCAACCTCCTAGAGAAGCACAACTGTCAAGAGTCT **ААААААААААА**С

1474/2682 FIGURE 1336

MEDAKVYVAKVDCTAHSDVCSAQGVRGYPTLKLFKPGQEAVKYQGPRDFQTLENWMLQTLNEEPVTPEPEVEPPS APELKQGLYELSASNFELHVAQGDHFIKFFAPWCGHCKALAPTWEQLALGLEHSETVKIGKVDCTQHYELCSGNQ VRGYPTLLWFRDGKKVDQYKGKRDLESLREYVESQLQRTETGATETVTPSEAPVLAAEPEADKGTVLALTENNFD DTIAEGITFIKFYAPWCGHCKTLAPTWEELSKKEFPGLAGVKIAEVDCTAERNICSKYSVRGYPTLLLFRGGKKV SEHSGGRDLDSLHRFVLSQAKDEL